

**Commonwealth of Kentucky
Energy and Environment Cabinet
Department for Environmental Protection
Division for Air Quality
200 Fair Oaks Lane, 1st Floor
Frankfort, Kentucky 40601
(502) 564-3999**

Final

**AIR QUALITY PERMIT
Issued under 401 KAR 52:020**

Permittee Name: Southwire Company
Mailing Address: One Southwire Drive, Carrollton, Georgia 30119

Source Name: Southwire Company
Mailing Address: 1987, State Route 271 North
Hawesville, KY 42348

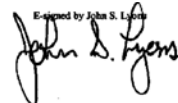
Source Location: 1987 State Route 271 North, Hawesville,
Kentucky

Permit: V-08-020
Agency Interest: 44199
Activity: APE20040001
Review Type: Title V, Operating
Source ID: 21-091-00009

Regional Office: Owensboro Regional Office
3032 Alvey Park Dr. W., Suite 700
Owensboro, KY 42303
(270) 687-7304

County: Hancock

Application
Complete Date: August 13, 2003
Issuance Date: January 15, 2009
Revision Date:
Expiration Date: January 15, 2014

E-signed by John S. Lyons


**John S. Lyons, Director
Division for Air Quality**

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SECTION A - PERMIT AUTHORIZATION

Pursuant to a duly submitted application the Kentucky Division for Air Quality hereby authorizes the operation of the equipment described herein in accordance with the terms and conditions of this permit. This permit has been issued under the provisions of Kentucky Revised Statutes Chapter 224 and regulations promulgated pursuant thereto.

The permittee shall not construct, reconstruct, or modify any affected facilities without first having submitted a complete application and receiving a permit for the planned activity from the permitting authority, except as provided in this permit or in 401 KAR 52:020, Title V Permits.

Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals required by this Cabinet or any other federal, state, or local agency.

SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**Group Requirements****01 (S1) Melt Furnace #1****Description:**

Melt furnace (S1) has an annual average process rate of 12.8 tons of aluminum per hour and a maximum natural gas usage rate of 25 MMBtu/hr, with backup fuels No. 2 fuel oil or propane. The melt furnace processes clean charge and/or material other than clean charge, with reactive flux or non-reactive flux. This melt furnace is a Group 1 furnace [40 CFR Part 63, Subpart RRR – National Standards for Hazardous Air Pollutants for Secondary Aluminum Production] and is located at Rod Mill #1.

Construction commenced – 1969.

02 (S2) Melt Furnace #2**Description:**

Melt furnace (S2) has an annual average process rate of 12.8 tons of aluminum per hour and a maximum natural gas usage rate of 25 MMBtu/hr, with backup fuels No. 2 fuel oil or propane. The melt furnace processes clean charge and/or material other than clean charge, with reactive flux or non-reactive flux. This melt furnace is a Group 1 furnace [40 CFR Part 63, Subpart RRR – National Standards for Hazardous Air Pollutants for Secondary Aluminum Production] and is located at Rod Mill #1.

Construction commenced – 1969.

APPLICABLE REGULATIONS:

401 KAR 61:020, Existing process operations

40 CFR 63, Subpart RRR – *National Emission Standards for Hazardous Air Pollutants for Secondary Aluminum Production*

401 KAR 63:002, Section 3(1)(eee) – *40 C.F.R. Part 63 National Emission Standards for Hazardous Air Pollutants, Subpart RRR incorporated by reference*

1. Operating Limitations:

- a) The provisions of 40 CFR Part 63, Subpart A - General Provisions, which are incorporated by reference in 401 KAR 63:002 Section 3 (a), apply to the Melt Furnaces (S1 and S2) except when otherwise specified in 40 CFR Part 63, Subpart RRR. [40 CFR Part 63, Subpart A]
- b) The permittee shall post an easily visible label at each furnace that identifies the applicable emission limits and means of compliance, including applicable operational standard(s) and control method(s). This includes but is not limited to the type of charge used for a furnace, flux materials and additional practices, and the applicable operating parameter ranges and requirements as incorporated in the OM&M Plan. [40 CFR Part 63.1506(b)]
- c) For Melt Furnaces (S1 and S2), the permittee shall: [40 CFR Part 63.1506 (d)]

SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- i. Except as provided in paragraph c)iii. of this condition, install and operate a device that measures and records or otherwise determines the weight of feed/charge (or throughput) for each operating cycle or time period used in the performance test; and
 - ii. Operate each weight measurement system or other weight determination procedure in accordance with the OM&M Plan.
 - iii. The permittee may choose to measure and record aluminum production weight from an affected source or emission unit rather than feed/charge weight to an affected source or emission unit, provided that:
 - A. The aluminum production weight, rather than feed/charge weight is measured and recorded for all emission units within a secondary aluminum processing unit (SAPU); and
 - B. All calculations to demonstrate compliance with the emission limits for SAPUs are based on aluminum production weight rather than feed/charge weight.
- d) For Melt Furnaces (S1 and S2), the permittee shall: [40 CFR Part 63.1506 (n)]
- i. Maintain the total reactive chlorine flux injection rate for each operating cycle or time period used in the performance test at or below the average rate established during the performance test; [40 CFR Part 63.1506 (n)(1)]
 - ii. Operate each furnace in accordance with the work practice/pollution prevention measures documented in the OM&M Plan and within the parameter values or ranges established in the OM&M Plan; and [40 CFR Part 63.1506 (n)(2)]
- e) When a process parameter or add-on air pollution control device operating parameter deviates from the value or range established during the performance test and incorporated in the OM&M Plan, the permittee shall initiate corrective action. Corrective action must restore operation of the affected source or emission unit (including the process or control device) to its normal or usual mode of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. Corrective actions taken must include follow-up actions necessary to return the process or control device parameter level(s) to the value or range of values established during the performance test and steps to prevent the likely recurrence of the cause of a deviation. [40 CFR Part 63.1506 (p)]

2. Emission Limitations:

- a) Pursuant to Regulation 401 KAR 61:020:
- i. Visible emissions shall not equal or exceed 40 percent opacity, as determined with Reference Method 9, Appendix A, 40 CFR 60.
 - ii. Hourly particulate emissions for each affected facility, as measured by Reference Method 5, Appendix A, 40 CFR 60 averaged over three hours or the minimum time specified, shall not exceed the limit calculated by the following formula:

$$E = 4.10 P^{0.67}$$

Where P is the process weight rate (all material added to the unit including fluxing agents and alloys) in tons/hour. If the process weight equals or is less than 0.5 ton/hour the particulate matter emission limitation shall be 2.58 lbs/hr. When this

SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

emission limitation exceeds the emission limitation specified in Condition b) below, then it is superseded by the emission limitation specified in Condition b) below.

- b) The following conditions shall apply to the Melting Furnaces (S1 and S2): [40 CFR Part 63.1505]
- i. The following limits must be used to determine emission standards for each existing SAPU within the secondary aluminum processing facility. [40 CFR Part 63.1505 (i)]
- A) The PM emissions from each furnace shall not exceed 0.4 pounds per ton of feed; and [40 CFR Part 63.1505 (i)(1)]
- B) The HCl emissions from each furnace shall not exceed 0.40 pounds per ton of feed; and [40 CFR Part 63.1505 (i)(4)]
- C) The Dioxin/Furan (D/F) emissions from each furnace shall not exceed 2.1×10^{-4} gr of D/F TEQ per ton of feed. [40 CFR 63.1505 (i)(3)]
- D) Emissions standards may be determined by applying group 1 furnace limits on the basis of aluminum production weight rather than on the basis of feed/charge.
- ii. Emission limits shall be calculated for each SAPU using the following equations: [40 CFR Part 63.1505(i)(6)]
- A) For each secondary aluminum processing unit, the permittee shall not discharge any 3-day, 24-hour rolling average emissions of PM in excess of: [40 CFR Part 63.1505 (k)(1)]

$$L_{cPM} = \frac{\sum_{i=1}^n (L_{tiPM} T_{ti})}{\sum_{i=1}^n (T_{ti})} \quad (\text{Eq. 1})$$

Where,

L_{tiPM} = The PM emission limit for individual unit i in the secondary aluminum processing unit [kg/Mg (lbs/ton) of feed];

T_{ti} = The feed/charge rate for individual emission unit i;

L_{cPM} = The PM emission limit for the secondary aluminum processing unit; and

n = The number of units in the secondary aluminum processing unit.

Pollutant	SAPU ₁ Emission limit	Unit
L_{cPM}	0.192	Lb/ton
L_{cHCl}	0.208	Lb/ton

Notes:

- 1 The Secondary Aluminum Processing unit (SAPU) at this facility is comprised of the individual group 1 furnaces identified as emission units 01(S1), 02(S2), 21 (S8, S9), and 23 (three in-line fluxers).

SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- B) For each secondary aluminum processing unit, the permittee shall not discharge any 3-day, 24-hour rolling average emissions of HCl in excess of: [40 CFR Part 63.1505 (k)(2)]

$$L_{cHCl} = \frac{\sum_{i=1}^n (L_{tiHCl} \chi T_{ti})}{\sum_{i=1}^n (T_{ti})} \quad (\text{Eq. 2})$$

Where,

L_{tiHCl} = The HCl emission limit for individual unit i in the secondary aluminum processing unit [kg/Mg (lbs/ton) of feed];

L_{cHCl} = The HCl emission limit for the secondary aluminum processing unit; and

n = The number of units in the secondary aluminum processing unit.

- C) For each secondary aluminum processing unit, the permittee shall not discharge any 3-day, 24-hour rolling average emissions of D/F in excess of: [40 CFR Part 63.1505 (k)(3)]

$$L_{cD/F} = \frac{\sum_{i=1}^n (L_{tiD/F} \chi T_{ti})}{\sum_{i=1}^n (T_{ti})} \quad (\text{Eq. 3})$$

Where,

$L_{tiD/F}$ = The D/F emission limit for individual unit i in the secondary aluminum processing unit [$\mu\text{g TEQ/Mg}$ (gr TEQ/ton) of feed];

$L_{cD/F}$ = The D/F emission limit for the secondary aluminum processing unit; and

n = The number of units in the secondary aluminum processing unit.

Compliance Demonstration Method:

- a) To provide reasonable assurance that the visible emission limitations are being met the permittee shall:
 - i. perform from each stack or vent, opacity readings using Reference Method 9 each calendar quarter, or more frequently if requested by the Division. Opacity readings shall be conducted while the emission units are operating.
 - ii. perform a qualitative visual observation of the opacity of emissions from each stack/vent on a daily basis and maintain a log of the observation. The log shall note:
 - A) whether any air emissions (except for water vapor) were visible from the vent/stack, and
 - B) all emission points from which visible emissions occurred.
 - iii. determine the opacity of emissions by Reference Method 9 if visible emissions are observed from any stack/vent.

SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- b) To provide reasonable assurance that the particulate matter emission limitations specified in 401 KAR 61:020 are met, the permittee shall monitor the amounts and types of process weight added to each emissions unit. The process weight rate shall be determined by dividing the tons of material added to each emission unit in a calendar month divided by total hours the unit operated that month.

The average particulate emissions shall be calculated as follows:

$$PE = PW \times PEF$$

Where PE = particulate emissions in average lbs/hr, PW = process weight in tons/hr, and PEF = particulate emission factor in lbs/ton of process weight.

The particulate emission factors shall be the number determined from the compliance test in testing requirements below or other emission test or emission factors approved by the Division.

- c) Compliance with emission limits listed in **Emissions Limitations** b)ii. may be shown by demonstrating that each emission unit within the SAPU is in compliance with the applicable emission limits listed in **Emissions Limitations** b)i.

3. Testing Requirements:

- a) The permittee shall determine compliance with applicable emission limits and standards using methods in Appendix A to 40 CFR 60, as listed in §63.1511(c).
- b) The testing required by **Testing Requirements** a) shall be repeated at least once every five (5) years from the date of the prior (initial) performance test. The performance test shall be done to demonstrate compliance with each applicable emission, equipment, work practice, or operational standard for each affected source and emission unit. [40 CFR Part 63.1511(e)]

Note: Tested on July 17-19, 2007

- c) Testing of representative emission units. With the prior approval of the permitting authority, an owner or operator may utilize emission rates obtained by testing a particular type of group 1 furnace which is not controlled by any add-on control device, or by testing an in-line flux box which is not controlled by any add-on control device, to determine the emission rate for other units of the same type at the same facility. Such emission test results may only be considered to be representative of other units if all of the following criteria are satisfied: [40 CFR Part 63.1511(f)]
- The tested emission unit must use feed materials and charge rates which are comparable to the emission units that it represents;
 - The tested emission unit must use the same type of flux materials in the same proportions as the emission units it represents;
 - The tested emission unit must be operated utilizing the same work practices as the emission units that it represents;

SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- iv. The tested emission unit must be of the same design as the emission units that it represents; and
- v. The tested emission unit must be tested under the highest load or capacity reasonably expected to occur for any of the emission units that it represents.

4. Specific Monitoring Requirements:

- a) The permittee shall prepare and implement for each new or existing affected source and emission unit, a written operation, maintenance, and monitoring (OM&M) plan. The OM&M Plan shall include: [40 CFR Part 63.1510 (b)]
 - i. Process parameters to be monitored to determine compliance, along with established operating levels or ranges, as applicable, for each process and control device.
 - ii. A monitoring schedule for each furnace.
 - iii. Procedures for the proper operation and maintenance of each of the Melting Furnaces (S1 and S2) to meet the applicable emission limits or standards in §63.1505.
 - iv. Procedures for the proper operation and maintenance of monitoring devices or systems used to determine compliance, including:
 - A) Calibration and certification of accuracy of each monitoring device, at least once every 6 months, according to the manufacturer's instructions.
 - v. Procedures for monitoring process parameters used for determining charge/feed (or throughput) weight if a measurement device is not used.
 - vi. Corrective actions to be taken when process or operating parameters or add-on control device parameters deviate from the value or range established pursuant to paragraph a)i. of this condition, including:
 - A) Procedures to determine and record the cause of an deviation or excursion, and the time the deviation or excursion began and ended; and
 - B) Procedures for recording the corrective action taken, the time corrective action was initiated, and the time/date corrective action was completed.
 - vii. A maintenance schedule for each process that is consistent with the manufacturer's instructions and recommendations for routine and long-term maintenance.
 - viii. Documentation of the work practice and pollution prevention measures used to achieve compliance with the applicable emission limits and a site-specific monitoring plan as required in §63.1510(o) for each of the Melting Furnaces (S1 and S2).
- b) The permittee shall inspect the labels for each of the Melting Furnaces (S1 and S2) at least once per calendar month to confirm that posted labels as required by the operational standard in §63.1506(b) are intact and legible. [40 CFR Part 63.1510 (c)]
- c) For each of the Melting Furnaces (S1 and S2) subject to an emission limit in kg/Mg (lb/ton) or µg/Mg (gr/ton) of feed/charge, the permittee shall install, calibrate, operate, and maintain a device to measure and record the total weight of feed/charge to, or the aluminum production from, the affected source or emission unit over the same operating cycle or time period used in the performance test. Feed/charge or aluminum production within SAPUs must be measured and recorded on an emission unit-by-emission unit basis. As an alternative to a measurement device, the permittee may use a procedure

SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- acceptable to the Division to determine the total weight of feed/charge or aluminum production to the affected source or emission unit. [40 CFR Part 63.1510 (e)]
- d) For each of the Melting Furnaces (S1 and S2), the permittee shall: [40 CFR Part 63.1510 (j)]
- i. Install, calibrate, operate, and maintain a device to continuously measure and record the weight of gaseous or liquid reactive flux injected to each of the Melting Furnaces (S1 and S2). For each monitoring device:
 - A) The monitoring system shall record, for each 15-minute block period during each operating cycle or time period used in the performance test during which reactive fluxing occurs, the time, weight, and type of flux for each addition of solid reactive flux;
 - B) The accuracy of the weight measurement device must be ± 1 percent of the weight of the reactive component of the flux being measured. The permittee may apply to the Division for permission to use a weight measurement device of alternative accuracy in cases where the reactive flux flow rates are so low as to make the use of a weight measurement device of ± 1 percent impracticable. A device of alternative accuracy will not be approved unless the permittee provides assurance through data and information that the affected source will meet the relevant emission standards.
 - C) The permittee shall verify the calibration of the weight measurement device in accordance with the schedule specified by the manufacturer, or if no calibration schedule is specified, at least once every 6 months;
 - ii. Calculate and record the gaseous or liquid reactive flux injection rate (kg/Mg or lb/ton) for each operating cycle or time period used in the performance test using the procedure in §63.1512(o);
 - iii. Record, for each 15-minute block period during each operating cycle or time period used in the performance test during which reactive fluxing occurs, the time, weight, and type of flux for each addition of; and
 - A) Gaseous or liquid reactive flux other than chlorine; and
 - B) Solid reactive flux.
 - iv. Calculate and record the total reactive flux injection rate for each operating cycle or time period used in the performance test using the procedure in §63.1512(o).
 - v. The permittee performing reactive fluxing may apply to the Division for approval of an alternative method for monitoring and recording the total reactive flux addition rate based on monitoring the weight or quantity of reactive flux per ton of feed/charge for each operating cycle or time period used in the performance test. An alternative monitoring method will not be approved unless the permittee provides assurance through data and information that the affected source will meet the relevant emission standards on a continuous basis.
- e) For Melting Furnaces (S1 and S2), the permittee shall: [40 CFR Part 63.1510 (o)]
- i. Develop in consultation with the Division, a written site-specific monitoring plan. The site-specific monitoring plan must be submitted to the Division as part of the OM&M Plan. [40 CFR Part 63.1510 (o)(1)]

SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- ii. The site-specific monitoring plan must document each work practice, equipment/design practice, pollution prevention practice, or other measure used to meet the applicable emission standards. [40 CFR Part 63.1510 (o)(2)]
 - iii. The site-specific monitoring plan must include provisions for unit labeling as required in §63.1510(c), feed/charge weight measurement (or production weight measurement) as required in §63.1510(e), and flux weight measurement as required in §63.1510 (j). [40 CFR Part 63.1510 (o)(3)]
 - iv. If a site-specific monitoring plan includes a scrap inspection program for monitoring the scrap contaminant level of furnace feed/charge materials, the plan must include provisions for the demonstration and implementation of the program in accordance with all applicable requirements in **Specific Monitoring Requirements** f). [40 CFR Part 63.1510 (o)(7)]
 - v. If a site-specific monitoring plan includes a calculation method for monitoring the scrap contaminate level of furnace feed/charge materials, the plan must include provisions for the demonstration and implementation of the program in accordance with all applicable requirements in **Specific Monitoring Requirements** g). [40 CFR Part 63.1510 (o)(8)]
- f) For Melting Furnaces (S1 and S2), the furnace charge materials not qualifying as clean charge shall be subject to a site-specific scrap monitoring plan. If the site-specific scrap monitoring plan calls for a scrap inspection program, the following program shall be implemented pursuant to 40 CFR Part 63.1510 (p):
- i. A proven method for collecting representative samples and measuring the oil and coatings content of scrap samples;
 - ii. A scrap inspector training program;
 - iii. An established correlation between visual inspection and physical measurement of oil and coatings content of scrap samples;
 - iv. Periodic physical measurements of oil and coatings content of randomly-selected scrap samples and comparison with visual inspection results;
 - v. A system for assuring that only acceptable scrap is charged to an affected group 1 furnace; and
 - vi. Recordkeeping requirements to document conformance with plan requirements.
- g) If Melting Furnaces (S1 and S2) are dedicated to processing a distinct type of furnace feed/charge composed of scrap with a uniform composition, the permittee may include a program in the site-specific monitoring plan for determining, monitoring, and certifying the scrap contaminate level using a calculation method rather than a scrap inspection program. A scrap contaminate monitoring program using a calculation method must include, 40 CFR Part 63.1510 (q):
- i. Procedures for the characterization and documentation of the contaminant level of the scrap prior to the performance test.
 - ii. Limitations on the furnace feed/charge to scrap of the same composition as that used in the performance test. If the performance test was conducted with a mixture of scrap and clean charge, limitations on the proportion of scrap in the furnace feed/charge to no greater than the proportion used during the performance test.

SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- iii. Operation, monitoring, recordkeeping, and reporting requirements to ensure that no scrap with a contaminant level higher than that used in the performance test is charged to the furnace.
- h) Site-specific information for secondary aluminum processing units shall be included, within the OM&M Plan prepared in accordance with §63.1510(b), and include the following information: [40 CFR Part 63.1510 (s)]
 - i. The identification of each emission unit in the secondary aluminum processing unit;
 - ii. The specific control technology or pollution prevention measure to be used for each emission unit in the secondary aluminum processing unit and the date of its installation or application;
 - iii. The emission limit calculated for each secondary aluminum processing unit and performance test results with supporting calculations demonstrating initial compliance with each applicable emission limit;
 - iv. Information and data demonstrating compliance for each emission unit with all applicable design, equipment, work practice or operational standards of this subpart; and
 - v. The monitoring requirements applicable to each emission unit in a secondary aluminum processing unit and the monitoring procedures for daily calculation of the 3-day, 24-hour rolling average using the procedure in §63.1510(t).
 - vi. The SAPU compliance procedures within the OM&M Plan may not contain any of the following provisions:
 - A) Any averaging among emissions of differing pollutants;
 - B) The inclusion of any affected sources other than emission units in a secondary aluminum processing unit;
 - C) The inclusion of any emission unit while it is shutdown; or
 - D) The inclusion of any periods of startup, shutdown, or malfunction in emission calculations.
 - vii. To revise the SAPU compliance provisions within the OM&M Plan prior to the end of the permit term, the permittee shall submit a request to the Division containing the information required by paragraphs h)i. through vi. of this condition and obtain approval of the Division prior to implementing any revisions.
- i) For each secondary aluminum processing unit, the 3-day and 24-hour rolling average emissions of PM, HCl, and D/F shall be calculated and recorded on a daily basis using the following equation. If compliance is based on weight of aluminum produced by the emission unit rather than weight of material charged to the emission unit, all performance test emission results and all calculations must be conducted on the aluminum production weight basis.[40 CFR Part 63.1510(t)]

$$E_{\text{Day}} = \sum_{i=1}^n (ER_i \times T_i) / \sum_{i=1}^n T_i$$

Where,

E_{Day} = The daily PM, HCl, or D/F emission rate for the secondary aluminum processing

SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

unit for the 24-hour period.

T_i = The total amount of feed, or aluminum produced, for emission unit i for the 24-hour period (tons).

ER_i = The measured emission rate for emission unit i as determined in the performance test (lb/ton of feed/charge).

n = The number of emission units in the secondary aluminum processing.

- j) As demonstrated in the facility's approved OM&M Plan and as an alternative to §63.1510(t), the permittee may demonstrate, through performance tests as in the facility's approved OM&M Plan, that each individual emission unit within the secondary aluminum production unit is in compliance with the applicable emission limits for the emission unit. [40 CFR Part 63.1510(u)]

5. Specific Record Keeping Requirements:

- a) Records shall be maintained of the daily visual observations, the calendar quarter observations by Reference Method 9, the amounts and types of process weight added to each emissions unit and the hours of operation.
- b) As required by §63.10(b), the permittee shall maintain files of all information (including all reports and notifications) required by 40 CFR 63, Subpart A and the records specified in **Specific Monitoring Requirements**, as required by Subpart RRR. [40 CFR Part 63.1517(a)]
- The permittee shall retain each record for at least 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. The most recent 2 years of records must be retained at the facility. The remaining 3 years of records may be retained off site;
 - The permittee may retain records on microfilm, computer disks, magnetic tape, or microfiche; and
 - The permittee may report required information on paper or on a labeled computer disk using commonly available and EPA-compatible computer software.
- c) The permittee shall maintain records of the following for the Melting Furnaces (S1 and S2): [40 CFR Part 63.1517 (b)]
- For each furnace, records of 15-minute block of solid reactive flux injection during each operating cycle or time period used in the performance test during which reactive flux fluxing occurs. Records are to include time, weight, type of flux and calculations of the total reactive flux injection rate for each operating cycle or time period used in the performance test using the procedure in §63.1512(o); [40 CFR Part 63.1517 (b)(5)]
 - For each continuous monitoring system, records required by §63.10(c); [40 CFR Part 63.1517 (b)(6)]
 - For each furnace that is subject to an emission standard in kg/Mg (lb/ton) of feed/charge, records of feed/charge (or throughput) weights for each operating cycle or time period used in the performance test; [40 CFR Part 63.1517 (b)(7)]

SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- iv. Approved site-specific monitoring plan for a group 1 furnace without add-on air pollution control devices with records documenting conformance with the plan; [40 CFR Part 63.1517 (b)(8)]
- v. Records of monthly inspections for proper unit labeling for each affected source and emission unit subject to labeling requirements; [40 CFR Part 63.1517 (b)(13)]
- vi. Records for any approved alternative monitoring or test procedure; [40 CFR Part 63.1517 (b)(15)]
- vii. Current copy of all required plans, including any revisions, with records documenting conformance with the applicable plan, including: [40 CFR Part 63.1517 (b)(16)]
 - A) Startup, shutdown, and malfunction plan;
 - B) OM&M Plan; and
 - C) Site-specific secondary aluminum processing unit emission plan (if applicable).
- viii. Records of total charge weight, or if compliance is on the basis of aluminum production, total aluminum produced for each 24-hour period and calculations of 3-day, 24-hour rolling average emissions. [40 CFR Part 63.1517 (b)(17)]

6. Specific Reporting Requirements:

- a) Any exceedance over the opacity and particulate emissions as stated in **Emission Limitations** a) shall be reported to the Division as specified in **Section F 6**. The company shall also certify to the Division, annually, that a daily visible emission survey is conducted and the specified records are being kept for this emission point. If more than two exceedances occur in any rolling six months, the permittee shall submit to the Division's Owensboro Regional Office no later than 30 days from the second exceedance a corrective action plan for the Division's approval.
- b) Startup, shutdown and malfunction plan/report: The permittee shall develop and implement a written plan that contains specific procedures to be followed for operating and maintaining the source during periods of startup, shutdown, and malfunction, and a program of corrective action for malfunctioning process and air pollution control equipment used to comply with the standard. The permittee shall also keep records of each event as required by §63.10(b) and record and report if an action taken during a startup, shutdown, or malfunction is not consistent with the procedures in the plan as described in §63.6(e)(3). In addition to the information required in §63.6(e)(3), the plan must include: [40 CFR Part 63.1516 (a)]
 - i. Procedures to determine and record the cause of the malfunction and the time the malfunction began and ended; and
 - ii. Corrective actions to be taken in the event of a malfunction of a process or control device, including procedures for recording the actions taken to correct the malfunction or minimize emissions.
- c) Excess emissions/summary report: The permittee shall submit semiannual reports as specified in **Section F 6**. Each report must contain the information specified in §63.10(c). When no deviations of parameters have occurred, the permittee shall submit a report stating that no excess emissions occurred during the reporting period. [40 CFR Part 63.1516 (b)]

SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- i. A report must be submitted if any of these conditions occur during a 6-month reporting period: [40 CFR Part 63.1516 (b)(1)]
 - A) An excursion of a compliant process or operating parameter value or range (e.g., total reactive chlorine flux injection rate, definition of acceptable scrap, or other approved operating parameter); [40 CFR Part 63.1516 (b)(1)(iv)]
 - B) An action taken during a startup, shutdown, or malfunction was not consistent with the procedures in the plan as described in §63.6(e)(3); [40 CFR Part 63.1516 (b)(1)(v)]
 - C) An affected source (including an emission unit in a secondary aluminum processing unit) was not operated according to the requirements of subpart RRR; or [40 CFR Part 63.1516 (b)(1)(vi)]
 - D) A deviation from the 3-day, 24-hour rolling average emission limit for a secondary aluminum processing unit. [40 CFR Part 63.1516 (b)(1)(vii)]
 - ii. The permittee shall submit the results of any performance test conducted during the reporting period, including one complete report documenting test methods and procedures, process operation, and monitoring parameter ranges or values for each test method used for a particular type of emission point tested. [40 CFR Part 63.1516 (b)(3)]
- d) For the purpose of annual certifications of compliance required by **Section F 9.**, the permittee shall certify continuing compliance based upon, but not limited to, the following conditions: [40 CFR Part 63.1516 (c)]
- i Any period of excess emissions, as defined in **Specific Reporting Requirements** c)i., that occurred during the year were reported as required by Subpart RRR; and
 - ii All monitoring, recordkeeping, and reporting requirements were met during the year.

SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**Group Requirements****03 (S4) Holding Furnace #1****Description:**

Holding furnace (S4) has an annual average process rate of 8.1 tons of aluminum per hour and a maximum natural gas usage rate of 10 MMBtu/hr, with backup fuels of No. 2 fuel oil or propane. The holding furnace processes clean charge with non-reactive flux. This holding furnace is a Group 2 furnace [40 CFR Part 63, Subpart RRR – National Standards for Hazardous Air Pollutants Secondary Aluminum Production] and is located at Rod Mill #1. Construction commenced - 1969.

04 (S5) Holding Furnace #2**Description:**

Holding furnace (S5) has an annual average process rate of 8.1 tons of aluminum per hour and a maximum natural gas usage rate of 7 MMBtu/hr, with backup fuels of No. 2 fuel oil or propane. The holding furnace processes clean charge with non-reactive flux. This holding furnace is a Group 2 furnace [40 CFR Part 63, Subpart RRR – National Standards for Hazardous Air Pollutants Secondary Aluminum Production] and is located at Rod Mill #1. Construction commenced - 1969.

APPLICABLE REGULATIONS:

401 KAR 61:020, Existing process operations

40 CFR 63, Subpart RRR - *National Emission Standards for Hazardous Air Pollutant Emissions for Secondary Aluminum Production*

401 KAR 63:002, Section 3(1)(eee) - *40 C.F.R. Part 63 National Emission Standards for Hazardous Air Pollutants, Subpart RRR incorporated by reference*

1. Operating Limitations:

- a) The provisions of 40 CFR Part 63, Subpart A - General Provisions, which are incorporated by reference in 401 KAR 63:002 Section 3 (a), apply to Holding Furnaces (S4 and S5) except when otherwise specified in 40 CFR Part 63, Subpart RRR. [40 CFR Part 63, Subpart A]
- b) The permittee shall post an easily visible label at each furnace that identifies the applicable emission limits and means of compliance, including applicable operational standard(s) and control method(s). This includes but is not limited to the type of charge used for a furnace, flux materials and additional practices, and the applicable operating parameter ranges and requirements as incorporated in the OM&M Plan. [40 CFR Part 63.1506(b)]
- c) The owner or operator must operate each new or existing group 2 furnace using only clean charge as feedstock and use no reactive flux.

SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**2. Emission Limitations:**

Pursuant to Regulation 401 KAR 61:020:

- a) Visible emissions shall not equal or exceed 40 percent opacity, as determined with Reference Method 9, Appendix A, 40 CFR 60.
- b) Hourly particulate emissions for each affected facility, as measured by Reference Method 5, Appendix A, 40 CFR 60 averaged over three hours or the minimum time specified, shall not exceed the limit calculated by the following formula:

$$E = 4.10 P^{0.67}$$

Where P is the process weight rate (all material added to the unit including fluxing agents and alloys) in tons/hour. If the process weight equals or is less than 0.5 ton/hour the particulate matter emission limitation shall be 2.58 lbs/hr.

Compliance Demonstration Method:

- a) To provide reasonable assurance that the visible emission limitations are being met the permittee shall:
 - i. perform from each stack or vent, opacity readings using Reference Method 9 each calendar quarter, or more frequently if requested by the Division. Opacity readings shall be conducted while the emission units are operating.
 - ii. perform a qualitative visual observation of the opacity of emissions from each stack/vent on a daily basis and maintain a log of the observation. The log shall note:
 - A) whether any air emissions (except for water vapor) were visible from the vent/stack, and
 - B) all emission points from which visible emissions occurred.
 - iii. determine the opacity of emissions by Reference Method 9 if visible emissions are observed from any stack/vent.
- b) To provide reasonable assurance that the particulate matter emission limitations specified in 401 KAR 61:020 are met, the permittee shall monitor the amounts and types of process weight added to each emissions unit. The process weight rate shall be determined by dividing the tons of material added to each emission unit in a calendar month divided by total hours the unit operated that month.

The average particulate emissions shall be calculated as follows:

$$PE = PW \times PEF$$

Where PE = particulate emissions in average lbs/hr, PW = process weight in tons/hr, and PEF = particulate emission factor in lbs/ton of process weight.

The particulate emission factors shall be the number determined from the compliance test in testing requirements below or other emission test or emission factors approved by the Division.

SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**3. Testing Requirements:**

None

4. Specific Monitoring Requirements:

- a) The permittee shall prepare and implement for each new or existing affected source and emission unit, a written operation, maintenance, and monitoring (OM&M) plan. The OM&M Plan shall include: [40 CFR Part 63.1510(b)]
 - i. Process parameters to be monitored to determine compliance, along with established operating levels or ranges, as applicable, for each process and control device.
 - ii. A monitoring schedule for each furnace.
 - iii. Corrective actions to be taken when process or operating parameters deviate from the value or range established pursuant to paragraph a)i. of this condition, including:
 - A) Procedures to determine and record the cause of a deviation or excursion, and the time the deviation or excursion began and ended; and
 - B) Procedures for recording the corrective action taken, the time corrective action was initiated, and the time/date corrective action was completed.
 - iv. A maintenance schedule for each process that is consistent with the manufacturer's instructions and recommendation for routine and long-term maintenance.
- b) The permittee shall inspect the label of Holding Furnaces (S4 and S5) at least once per calendar month to confirm that posted labels as required by the operational standards in §63.1506(b) are intact and legible. [40 CFR Part 63.1510(c)]
- c) The owner or operator of new or existing group 2 furnaces must: [40 CFR Part 63.1510(r)]
 - i. Record a description of the materials charged to each furnace, including any non-reactive flux, non-HAP-containing/non-HAP-generating fluxing materials or agents.
 - ii. Submit a certification of compliance with the applicable operational standard for charge materials in §63.1506(o) for each 6-month reporting period. Each certification must contain the information in §63.1516(b)(2)(v).

5. Specific Record Keeping Requirements:

- a) Records shall be maintained of the daily visual observations, the calendar quarter observations by Reference Method 9, the amounts and types of process weight added to each emissions unit and the hours of operation.
- b) As required by §63.10(b), the permittee shall maintain files of all information (including reports and notifications) required by 40 CFR 63, Subpart A and records specified in **Specific Monitoring Requirements**, as required by Subpart RRR. [40 CFR Part 63.1517(a)]
 - i. The permittee shall retain each record for at least 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. The most recent 2 years of records must be retained at the facility. The remaining 3 years of records may be retained off site;

SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- ii. The permittee may retain records on microfilm, computer disk, magnetic tape, or microfiche; and
 - iii. The permittee may report required information on paper or on a labeled computer disk using commonly available and EPA-compatible computer software.
- c) The permittee shall maintain records of the following for Holding Furnaces (S4 and S5): [40 CFR Part 63.1517(b)]
- i. Records of all charge materials and fluxing materials or agents for a group 2 furnace.
 - ii. Records of monthly inspections for proper unit labeling for each affected source and emission unit subject to labeling requirements.
 - iii. Records for any approved alternative monitoring or test procedure.
 - iv. A current copy of all required plans, including any revisions, with records documenting conformance with the applicable plan, including:
 - A) Startup, shutdown, and malfunction plan;
 - B) OM&M Plan.

6. Specific Reporting Requirements:

- a) Any exceedance over the opacity and particulate emissions as stated in **Emission Limitations** a) and b), shall be reported to the Division as specified in **Section F 6**. The company shall also certify to the Division annually, that a daily visible emission survey is conducted and the specified records are being kept for this emission point. If more than two exceedances occur in any rolling six months, the permittee shall submit to the Division's Owensboro Regional Office no later than 30 days from the second exceedance a corrective action plan for the Division's approval.
- b) *Startup, shutdown, and malfunction plan/report:* The permittee shall develop and implement a written plan that contains specific procedures to be followed for operating and maintaining the source during periods of startup, shutdown, and malfunction, and a program of corrective action for malfunctioning process and air pollution control equipment used to comply with the standard. The permittee shall also keep records of each event as required by §63.10(b) and record and report if an action taken during a startup, shutdown, or malfunction is not consistent with the procedures in the plan as described in §63.6(e)(3). In addition to the information required in §63.6(e)(3), the plan must include: [40 CFR 63.1516(a)]
- i. Procedures to determine and record the cause of the malfunction and the time the malfunction began and ended; and
 - ii. Corrective actions to be taken in the event of a malfunction of a process or control device, including procedures for recording the action taken to correct the malfunction or minimize emissions.
- c) *Excess emissions/summary report:* The permittee shall submit semiannual reports within 60 days after the end of each 6 months period. Each report must contain the information specified in §63.10(c). When no deviations of parameters have occurred, the permittee shall submit a report stating that no excess emissions occurred during the reporting period. [40 CFR Part 63.1516(b)]

SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- i. A report must be submitted if any of these conditions occur during a 6-month reporting period: [40 CFR 63.15165(b)(1)]
 - A) An excursion of a compliant process or operating parameter value or range;
 - B) An action taken during a startup, shutdown, or malfunction was not consistent with the procedures in the plan as described in §63.6(e)(3); or
 - C) An affected source was not operated according to the requirements on Subpart RRR.
 - ii. Each report must include the following certification for the group 2 furnaces: “Only clean charge materials were processed in any group 2 furnace during this reporting period, and no fluxing was performed or all fluxing performed was conducted using only non-reactive, non-HAP-containing/non-HAP-generating fluxing gases or agents, except for cover fluxes, during this reporting period.” [40 CFR Part 63.1516(b)(2)]
 - iii. The owner or operator must submit the results of any performance test conducted during the reporting period, including on complete report documenting test methods and procedures, process operating, and monitoring parameter ranges or values for each test method used for a particular type of emission point tested. [40 CFR Part 63.1516(b)(3)]
- d) *Annual compliance certifications:* For the purpose of annual certifications of compliance required **Section F 9.**, the owner or operator must certify continuing compliance based upon, but not limited to, the following conditions: [40 CFR Part 63.1516(c)]
- i. Any period of excess emissions, as defined in **Specific Reporting Requirements** c)i., that occurred during the year were reported as required by Subpart RRR; and
 - ii. All monitoring, recordkeeping, and reporting requirements were met during the year.

SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**14 (S3) Melt Furnace #3****Description:**

Melt furnace (S3) with an annual average process rate of 13 tons of aluminum per hour and a maximum natural gas usage rate of 25 MMBtu/hr, with backup fuels No. 2 fuel oil or propane. The melt furnace processes clean charge with non-reactive flux. This melt furnace is a Group 2 furnace [40 CFR Part 63, Subpart RRR – National Standards for Hazardous Air Pollutants for Secondary Aluminum Production] and is located at Rod Mill #2.

Construction commenced – 1992.

APPLICABLE REGULATIONS:

401 KAR 59:010, New process operations

401 KAR 59:105, New process gas streams

Self-imposed limitations to preclude 401 KAR 51:017, PSD

40 CFR 63, Subpart RRR – *National Emission Standards for Hazardous Air Pollutants for Secondary Aluminum Production*

401 KAR 63:002, Section 3(1)(eee) – *40 C.F.R. Part 63 National Emission Standards for Hazardous Air Pollutants, Subpart RRR incorporated by reference*

1. Operating Limitations:

- a) Only natural gas, No. 2 fuel oil, and propane shall be used. Fuel oil usage rate shall not exceed 65,000 gallons/month, and the sulfur in the fuel oil shall not exceed 0.7% sulfur (weight). This is a self-imposed operating limitation to preclude the applicability of 401 KAR 51:017, Prevention of significant deterioration.
- b) Only fluoride free fluxing agents shall be used.
- c) The provisions of 40 CFR Part 63, Subpart A - General Provisions, which are incorporated by reference in 401 KAR 63:002 Section 3 (a), apply to Melting Furnace (S3) except when otherwise specified in 40 CFR Part 63, Subpart RRR. [40 CFR Part 63, Subpart A]
- d) The permittee shall post an easily visible label at each furnace that identifies the applicable emission limits and means of compliance, including applicable operational standard(s) and control method(s). This includes but is not limited to the type of charge used for a furnace, flux materials and additional practices, and the applicable operating parameter ranges and requirements as incorporated in the OM&M Plan. [40 CFR Part 63.1506(b)]
- e) The owner or operator must operate each new or existing group 2 furnace using only clean charge as feedstock, and use no reactive flux.

2. Emission Limitations:

- a) Pursuant to Regulation 401 KAR 59:010:
 - i. Visible emissions shall not exceed 20 percent opacity, as determined with Reference Method 9, Appendix A, 40 CFR 60.

SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- ii. Hourly particulate emissions for each affected facility, as measured by Reference Method 5, Appendix A, 40 CFR 60 average over three hours or the minimum time specified, shall not exceed the limit calculated by the following formula or 5.6 lbs/hr (self-imposed) whichever is less:

$$E = 3.59 P^{0.62}$$

Where P is the process weight rate (all material added to the unit including fluxing agents and alloys) in tons/hour and E is the emission limit in pounds/hour.

- b) Self-imposed limitation to preclude 401 KAR 51:017, PSD:
 - i. Hourly PM10 emissions shall not exceed 3.4 lb/hr; and
 - ii. Sulfur dioxide emissions shall not exceed 3.25 tons/month.
- c) Pursuant to 401 KAR 59:105:

SO₂ in the process gas stream shall not exceed 28.63 grains per 100 dscf at zero percent oxygen.

Compliance Demonstration Method:

- a) To provide reasonable assurance that the visible emission limitations are being met the permittee shall:
 - i. perform from each stack or vent, opacity readings using Reference Method 9 each calendar quarter, or more frequently if requested by the Division. Opacity readings shall be conducted while the emission units are operating.
 - ii. perform a qualitative visual observation of the opacity of emissions from each stack/vent on a daily basis and maintain a log of the observation. The log shall note:
 - A) whether any air emissions (except for water vapor) were visible from the vent/stack, and
 - B) all emission points from which visible emissions occurred.
 - iii. determine the opacity of emission by Reference Method 9 if visible emissions are observed from any stack/vent.
- b) To provide reasonable assurance that the particulate matter emission limitations specified in 401 KAR 59:010 are met the permittee shall monitor the amounts and types of process weight added to each emissions unit. The process weight rate shall be determined by dividing the tons of material added to each emission unit in a calendar month divided by total hours the unit operated that month.

The average particulate emissions shall be calculated as follows:

$$PE = PW \times PEF$$

Where PE = particulate emissions in average lbs/hr, PW = process weight in tons/hr, and PEF = particulate emission factor in lbs/ton process weight. The particulate emission factors shall be the number determined from compliance testing or other emission test or

SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

emission factors approved by the Division.

3. Testing Requirements:

None

4. Specific Monitoring Requirements:

- a) The permittee shall prepare and implement for each new or existing affected source and emission unit, a written operation, maintenance, and monitoring (OM&M) plan. The OM&M Plan shall include: [40 CFR Part 63.1510(b)]
 - i. Process parameters to be monitored to determine compliance, along with established operating levels or ranges, as applicable, for each process and control device.
 - ii. A monitoring schedule for each furnace.
 - iii. Corrective actions to be taken when process or operating parameters deviate from the value or range established pursuant to paragraph a)i. of this condition, including:
 - A) Procedures to determine and record the cause of a deviation or excursion, and the time the deviation or excursion began and ended; and
 - B) Procedures for recording the corrective action taken, the time corrective action was initiated, and the time/date corrective action was completed.
 - iv. A maintenance schedule for each process that is consistent with the manufacturer's instructions and recommendation for routine and long-term maintenance.
- b) The permittee shall inspect the label of the Melting Furnace (S3) at least once per calendar month to confirm that posted labels as required by the operational standards in §63.1506(b) is intact and legible. [40 CFR Part 63.1510(c)]
- c) The owner or operator of new or existing group 2 furnaces must: [40 CFR Part 63.1510(r)]
 - i. Record a description of the materials charged to each furnace, including any non-reactive flux, non-HAP-containing/non-HAP-generating fluxing materials or agents.
 - ii. Submit a certification of compliance with the applicable operational standard for charge materials in §63.1506(o) for each 6-month reporting period. Each certification must contain the information in §63.1516(b)(2)(v).

5. Specific Recordkeeping Requirements:

- a) Records shall be maintained of the daily visual observations, the calendar quarter observations by Reference Method 9, the amounts and types of process weight added to each emissions unit and the hours of operation.
- b) As required by §63.10(b), the permittee shall maintain files of all information (including reports and notifications) required by 40 CFR 63, Subpart A and records specified in **Specific Monitoring Requirements**, as required by Subpart RRR. [40 CFR Part 63.1517(a)]
 - i. The permittee shall retain each record for at least 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. The

SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- most recent 2 years of records must be retained at the facility. The remaining 3 years of records may be retained off site;
- ii. The permittee may retain records on microfilm, computer disk, magnetic tape, or microfiche; and
 - iii. The permittee may report required information on paper or on a labeled computer disk using commonly available and EPA-compatible computer software.
- c) The permittee shall maintain records of the following for Melting Furnace (S3): [40 CFR Part 63.1517(b)]
- i. Records of all charge materials and fluxing materials or agents for a group 2 furnace.
 - ii. Records of monthly inspections for proper unit labeling for each affected source and emission unit subject to labeling requirements.
 - iii. Records for any approved alternative monitoring or test procedure.
 - iv. A current copy of all required plans, including any revisions, with records documenting conformance with the applicable plan, including:
 - A) Startup, shutdown, and malfunction plan;
 - B) OM&M Plan.

6. Specific Reporting Requirements:

- a) Any exceedance over the opacity, particulate, and SO₂ emissions as stated in **Emission Limitations** a) through c), shall be reported to the Division as specified in **Section F 6**. The company shall also certify to the Division annually, that a daily visible emission survey is conducted and the specified records are being kept for this emission point. If more than two exceedances occur in any rolling six months, the permittee shall submit to the Division's Owensboro Regional Office no later than 30 days from the second exceedance a corrective action plan for the Division's approval.
- b) *Startup, shutdown, and malfunction plan/report:* The permittee shall develop and implement a written plan that contains specific procedures to be followed for operating and maintaining the source during periods of startup, shutdown, and malfunction, and a program of corrective action for malfunctioning process and air pollution control equipment used to comply with the standard. The permittee shall also keep records of each event as required by §63.10(b) and record and report if an action taken during a startup, shutdown, or malfunction is not consistent with the procedures in the plan as described in §63.6(e)(3). In addition to the information required in §63.6(e)(3), the plan must include: [40 CFR 63.1516(a)]
- i. Procedures to determine and record the cause of the malfunction and the time the malfunction began and ended; and
 - ii. Corrective actions to be taken in the event of a malfunction of a process or control device, including procedures for recording the action taken to correct the malfunction or minimize emissions.
- c) *Excess emissions/summary report:* The permittee shall submit semiannual reports within 60 days after the end of each 6 months period. Each report must contain the information specified in §63.10(c). When no deviations of parameters have occurred, the permittee

SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- shall submit a report stating that no excess emissions occurred during the reporting period. [40 CFR Part 63.1516(b)]
- i. A report must be submitted if any of these conditions occur during a 6-month reporting period: [40 CFR 63.1516(b)(1)]
 - A) An excursion of a compliant process or operating parameter value or range;
 - B) An action taken during a startup, shutdown, or malfunction was not consistent with the procedures in the plan as described in §63.6(e)(3); or
 - C) An affected source was not operated according to the requirements on Subpart RRR.
 - ii. Each report must include the following certification for the group 2 furnace:
“Only clean charge materials were processed in any group 2 furnace during this reporting period, and no fluxing was performed or all fluxing performed was conducted using only non-reactive, non-HAP-containing/non-HAP-generating fluxing gases or agents, except for cover fluxes, during this reporting period.” [40 CFR Part 63.1516(b)(2)]
 - iii. The owner or operator must submit the results of any performance test conducted during the reporting period, including on complete report documenting test methods and procedures, process operating, and monitoring parameter ranges or values for each test method used for a particular type of emission point tested. [40 CFR Part 63.1516(b)(3)]
- d) *Annual compliance certifications*: For the purpose of annual certifications of compliance required **Section F 9.**, the owner or operator must certify continuing compliance based upon, but not limited to, the following conditions: [40 CFR Part 63.1516(c)]
- i. Any period of excess emissions, as defined in **Specific Reporting Requirements** c)i., that occurred during the year were reported as required by Subpart RRR; and
 - ii. All monitoring, recordkeeping, and reporting requirements were met during the year.

SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**13 (S6 & S7) Holding Furnaces #3 & #4****Description:**

Holding furnaces (S6 & S7) have a combined annual average process rate of 13.7 tons of aluminum per hour and a maximum natural gas usage rate of 10.5 MMBtu/hr, with backup fuels of No. 2 fuel oil and propane. The hold furnaces process clean charge with non-reactive flux. These holding furnaces are Group 2 furnaces [40 CFR Part 63, Subpart RRR – National Standards for Hazardous Air Pollutants Secondary Aluminum Production] and are located at Rod Mill #2. Construction commenced - 1989.

APPLICABLE REGULATIONS:

401 KAR 59:010, New process operations

401 KAR 59:105, New process gas streams

Self-imposed limitations to preclude 401 KAR 51:017, PSD

40 CFR 63, Subpart RRR - *National Emission Standards for Hazardous Air Pollutant Emissions for Secondary Aluminum Production*

401 KAR 63:002, Section 3(1)(eee) - *40 C.F.R. Part 63 National Emission Standards for Hazardous Air Pollutants, Subpart RRR incorporated by reference*

1. Operating Limitations:

- a) Only natural gas, No. 2 fuel oil, and propane shall be used. Fuel oil usage rate shall not exceed 65,000 gallons/month and the sulfur in the fuel oil shall not exceed 0.7% sulfur (weight). This is a self-imposed operating limitation to preclude applicability of 401 KAR 51:017, Prevention of significant deterioration.
- b) Only fluoride free fluxing agents shall be used.
- c) The provisions of 40 CFR Part 63, Subpart A - General Provisions, which are incorporated by reference in 401 KAR 63:002 Section 3 (a), apply to the Holding Furnaces (S6 and S7) except when otherwise specified in 40 CFR Part 63, Subpart RRR. [40 CFR Part 63, Subpart A]
- d) The permittee shall post an easily visible label at each furnace that identifies the applicable emission limits and means of compliance, including applicable operational standard(s) and control method(s). This includes but is not limited to the type of charge used for a furnace, flux materials and additional practices, and the applicable operating parameter ranges and requirements as incorporated in the OM&M Plan. [40 CFR Part 63.1506(b)]
- e) The owner or operator must operate each new or existing group furnace using only clean charge as feedstock, and use no reactive flux.

2. Emission Limitations:

- a) Pursuant to Regulation 401 KAR 59:010:
 - i. Visible emissions shall not equal or exceed 20 percent opacity, as determined with Reference Method 9, Appendix A, 40 CFR 60.

SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- ii. Hourly particulate emissions for each affected facility, as measured by Reference Method 5, Appendix A, 40 CFR 60, averaged over three hours or the minimum time specified, shall not exceed the limit calculated by the following formula or combined particulate emission rate 5.6 lbs/hr (self-imposed) whichever is less:

$$E = 3.59 P^{0.62}$$

Where P is the process weight (total weight of all materials introduced into the emission unit including fluxing agents and alloys) in lbs/hour. If the process weight equals, or is less, than 0.5 ton/hour the particulate matter emission limitation shall be 2.34 lbs/hr.

- b) Self-imposed limitation to preclude 401 KAR 51:017, PSD:
 - i. Combined hourly PM₁₀ emissions shall not exceed 3.4 lbs/hr; and
 - ii. Combined sulfur dioxide emissions shall not exceed 3.25 tons/month.
- c) Pursuant to 401 KAR 59:105:

SO₂ in the process gas stream shall not exceed 28.63 grains per 100 dscf at zero percent oxygen.

Compliance Demonstration Method:

- a) To provide reasonable assurance that the visible emission limitations are being met the permittee shall:
 - i. perform from each stack or vent, opacity readings using Reference Method 9 each calendar quarter, or more frequently if requested by the Division. Opacity readings shall be conducted while the emission units are operating.
 - ii. perform a qualitative visual observation of the opacity of emissions from each stack/vent on a daily basis and maintain a log of the observation. The log shall note:
 - A. whether any air emissions (except for water vapor) were visible from the vent/stack, and
 - B. all emission points from which visible emissions occurred.
 - iii. determine the opacity of emissions by Reference Method 9 if visible emissions are observed from any stack/vent.
- b) To provide reasonable assurance that the particulate matter emission limitations specified in 401 KAR 59:010 are met, the permittee shall monitor the amounts and types of process weight added to each emissions unit. The process weight rate shall be determined by dividing the tons of material added to each emission unit in a calendar month divided by total hours the unit operated that month.

The average particulate emissions shall be calculated as follows:

$$PE = PW \times PEF$$

Where PE = particulate emissions in average lbs/hr, PW = process weight in tons/hr, and PEF = particulate emission factor in lbs/ton of process weight.

SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

The particulate emission factors shall be the number determined from the compliance test required in testing requirements below or other emission test or emission factors approved by the Division.

3. Testing Requirements:

None.

4. Specific Monitoring Requirements:

- a) To provide reasonable assurance that the sulfur dioxide emission limitations are being met, the permittee shall monitor monthly the amount, sulfur content, and the type of fuel oil used.
- b) The permittee shall prepare and implement for each new or existing affected source and emission unit, a written operation, maintenance, and monitoring (OM&M) plan. The OM&M Plan shall include: [40 CFR Part 63.1510 (b)]
 - i. Process parameters to be monitored to determine compliance, along with established operating levels or ranges, as applicable, for each process and control device.
 - ii. A monitoring schedule for each furnace.
 - iii. Corrective actions to be taken when process or operating parameters or add-on control device parameters deviate from the value or range established pursuant to **Specific Monitoring Requirements** b)i., including:
 - A. Procedures to determine and record the cause of an deviation or excursion, and the time the deviation or excursion began and ended; and
 - B. Procedures for recording the corrective action taken, the time corrective action was initiated, and the time/date corrective action was completed.
 - iv. A maintenance schedule for each process that is consistent with the manufacturer's instructions and recommendations for routine and long-term maintenance.
 - v. Documentation of the work practice and pollution prevention measures used to achieve compliance with the applicable emission limits and a site-specific monitoring plan as required in §63.1510 (o) for Holding Furnaces (S6 and S7).
- c) The permittee shall inspect the labels for Holding Furnaces (S6 and S7) at least once per calendar month to confirm that posted labels as required by the operational standard in §63.1506(b) are intact and legible. [40 CFR Part 63.1510 (c)]
- d) The owner or operator of new or existing group 2 furnaces must: [40 CFR Part 63.1510(r)]
 - i. Record a description of the materials charged to each furnace, including any non-reactive flux, non-HAP-containing/non-HAP-generating fluxing materials or agents.
 - ii. Submit a certification of compliance with the applicable operational standard for charge materials in §63.1506(o) for each 6-month reporting period. Each certification must contain the information in §63.1516(b)(2)(v).

SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**5. Specific Record Keeping Requirements:**

- a) Records shall be maintained of the daily visual observations, the calendar quarter observations by Reference Method 9, the amounts and types of process weight added to each emissions unit and the hours of operation.
- b) The permittee shall maintain records and certify every 6 months that only fluoride free flux is used in accordance with **Operating Limitations** b).
- c) As required by §63.10(b), the permittee shall maintain files of all information (including all reports and notifications) required by 40 CFR 63, Subpart A and the records specified in **Specific Monitoring Requirements**, as required by subpart RRR. [40 CFR Part 63.1517 (a)]
 - i. The permittee shall retain each record for at least 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. The most recent 2 years of records must be retained at the facility. The remaining 3 years of records may be retained off site;
 - ii. The permittee may retain records on microfilm, computer disks, magnetic tape, or microfiche; and
 - iii. The permittee may report required information on paper or on a labeled computer disk using commonly available and EPA-compatible computer software.
- d) The permittee shall maintain records of the following for Holding Furnaces (S6 and S7): [40 CFR Part 63.1517(b)]
 - i. Records of all charge materials and fluxing materials or agents for a group 2 furnace.
 - ii. Records of monthly inspections for proper unit labeling for each affected source and emission unit subject to labeling requirements.
 - iii. Records for any approved alternative monitoring or test procedure.
 - iv. A current copy of all required plans, including any revisions, with records documenting conformance with the applicable plan, including:
 - A) Startup, shutdown, and malfunction plan;
 - B) OM&M Plan.

6. Specific Reporting Requirements:

- a) Any exceedance over the opacity, particulate, and SO₂ emissions as stated in **Emission Limitations** a) through c), shall be reported to the Division as specified in **Section F 6**. The company shall also certify to the Division, annually, that a daily visible emission survey is conducted and the specified records are being kept for this emission point. If more than two exceedances occur in any rolling six months, the permittee shall submit to the Division's Owensboro Regional Office no later than 30 days from the second exceedance a corrective action plan for the Division's approval.
- b) Startup, shutdown and malfunction plan/report: The permittee shall develop and implement a written plan that contains specific procedures to be followed for operating and maintaining the source during periods of startup, shutdown, and malfunction, and a program of corrective action for malfunctioning process and air pollution control

SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- equipment used to comply with the standard. The permittee shall also keep records of each event as required by §63.10(b) and record and report if an action taken during a startup, shutdown, or malfunction is not consistent with the procedures in the plan as described in §63.6(e)(3). In addition to the information required in §63.6(e)(3), the plan must include: [40 CFR Part 63.1516 (a)]
- i. Procedures to determine and record the cause of the malfunction and the time the malfunction began and ended; and
 - ii. Corrective actions to be taken in the event of a malfunction of a process or control device, including procedures for recording the actions taken to correct the malfunction or minimize emissions.
- c) Excess emissions/summary report: The permittee shall submit semiannual reports as specified in **Section F 6**. Each report must contain the information specified in §63.10(c). When no deviations of parameters have occurred, the permittee shall submit a report stating that no excess emissions occurred during the reporting period. [40 CFR Part 63.1516 (b)]
- i. A report must be submitted if any of these conditions occur during a 6-month reporting period: [40 CFR Part 63.1516 (b)(1)]
 - A. An excursion of a compliant process or operating parameter value or range (e.g., total reactive chlorine flux injection rate, definition of acceptable scrap, or other approved operating parameter); [40 CFR Part 63.1516 (b)(1)(iv)]
 - B. An action taken during a startup, shutdown, or malfunction was not consistent with the procedures in the plan as described in §63.6(e)(3); [40 CFR Part 63.1516 (b)(1)(v)]
 - C. An affected source (including an emission unit in a secondary aluminum processing unit) was not operated according to the requirements of subpart RRR; and [40 CFR Part 63.1516 (b)(1)(vi)]
 - ii. Each report must include the following certification for the group 2 furnaces:
“Only clean charge materials were processed in any group 2 furnace during this reporting period, and no fluxing was performed or all fluxing performed was conducted using only non-reactive, non-HAP-containing/non-HAP-generating fluxing gases or agents, except for cover fluxes, during this reporting period.” [40 CFR Part 63.1516(b)(2)]
 - iii. The owner or operator must submit the results of any performance test conducted during the reporting period, including on complete report documenting test methods and procedures, process operating, and monitoring parameter ranges or values for each test method used for a particular type of emission point tested. [40 CFR Part 63.1516(b)(3)]
- d) *Annual compliance certifications*: For the purpose of annual certifications of compliance required **Section F 9**., the owner or operator must certify continuing compliance based upon, but not limited to, the following conditions: [40 CFR Part 63.1516(c)]
- i. Any period of excess emissions, as defined in **Specific Reporting Requirements** c)i., that occurred during the year were reported as required by Subpart RRR; and
 - ii. All monitoring, recordkeeping, and reporting requirements were met during the year.

SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**21 (S8, S9) Two (2) Melting/Holding Furnaces****Description:**

Melting/holding furnaces (S8 & S9) each has an annual average process rate of 2.75 tons of aluminum per hour and a maximum natural gas usage rate of 18 MMBtu/hr, with backup fuels of No. 2 fuel oil and propane. Melting/Holding furnaces process clean charge and/or material other than clean charge, with reactive flux or non-reactive flux. The Melting/Holding Furnaces (S8 and S9) are Group 1 furnaces [40 CFR Part 63, Subpart RRR – National Standards for Hazardous Air Pollutants Secondary Aluminum Production] and are located at Rod Mill#3.

Construction commenced - April 18, 1997

APPLICABLE REGULATIONS:

401 KAR 59:010, New process operations

401 KAR 59:105, New process gas streams

Self-imposed limitations to preclude 401 KAR 51:017, PSD

Self-imposed state origin requirements

40 CFR 63, Subpart RRR - *National Emission Standards for Hazardous Air Pollutant Emissions for Secondary Aluminum Production*

401 KAR 63:002, Section 3(1)(eee) - *40 C.F.R. Part 63 National Emission Standards for Hazardous Air Pollutants, Subpart RRR incorporated by reference*

1. Operating Limitations:

- a) Only natural gas, No. 2 fuel oil, and propane shall be used. Fuel oil usage rate shall not exceed 65,000 gallons/month and the sulfur in the fuel oil shall not exceed 0.7% sulfur (weight). This is a self-imposed operating limitation to preclude applicability of 401 KAR 51:017, Prevention of significant deterioration.
- b) Only fluoride-free fluxing agents shall be used.
- c) The provisions of 40 CFR Part 63, Subpart A - General Provisions, which are incorporated by reference in 401 KAR 63:002 Section 3 (a), apply to the Melting/Holding Furnaces (S8 and S9) except when otherwise specified in 40 CFR Part 63, Subpart RRR. [40 CFR Part 63, Subpart A]
- d) The permittee shall post an easily visible label at each furnace that identifies the applicable emission limits and means of compliance, including applicable operational standard(s) and control method(s). This includes but is not limited to the type of charge used for a furnace, flux materials and additional practices, and the applicable operating parameter ranges and requirements as incorporated in the OM&M Plan. [40 CFR Part 63.1506(b)]
- e) For each of the Melting/Holding Furnaces (S8 and S9), the permittee shall: [40 CFR Part 63.1506 (d)]
 - i. Except as provided in paragraph e)iii. of this Condition, install and operate a device that measures and records or otherwise determine the weight of feed/charge (or throughput) for each operating cycle or time period used in the performance test; and

SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- ii. Operate each weight measurement system or other weight determination procedure in accordance with the OM&M Plan.
- iii. The permittee may choose to measure and record aluminum production weight from an affected source or emission unit rather than feed/charge weight to an affected source or emission unit, provided that:
 - A. The aluminum production weight, rather than feed/charge weight is measured and recorded for all emission units within a SAPU; and
 - B. All calculations to demonstrate compliance with the emission limits for SAPUs are based on aluminum production weight rather than feed/charge weight.
- f) For Melting/Holding Furnaces (S8 and S9), the permittee shall: [40 CFR Part 63.1506 (n)]
 - i. Maintain the total reactive chlorine flux injection rate for each operating cycle or time period used in the performance test at or below the average rate established during the performance test; [40 CFR Part 63.1506 (n)(1)]
 - ii. Operate each furnace in accordance with the work practice/pollution prevention measures documented in the OM&M Plan and within the parameter values or ranges established in the OM&M Plan; and [40 CFR Part 63.1506 (n)(2)]
- g) When a process parameter or add-on air pollution control device operating parameter deviates from the value or range established during the performance test and incorporated in the OM&M Plan, the permittee shall initiate corrective action. Corrective action must restore operation of the affected source or emission unit (including the process or control device) to its normal or usual mode of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. Corrective actions taken must include follow-up actions necessary to return the process or control device parameter level(s) to the value or range of values established during the performance test and steps to prevent the likely recurrence of the cause of a deviation. [40 CFR Part 63.1506 (p)]

2. Emission Limitations:

- a) Pursuant to Regulation 401 KAR 59:010:
 - i. Visible emissions shall not equal or exceed 20 percent opacity, as determined with Reference Method 9, Appendix A, 40 CFR 60.
 - ii. Hourly particulate emissions for each affected facility, as measured by Reference Method 5, Appendix A, 40 CFR 60, averaged over three hours or the minimum time specified, shall not exceed the limit calculated by the following formula or combined particulate emission rate 5.6 lbs/hr (self-imposed) whichever is less:

$$E = 3.59 P^{0.62}$$

Where P is the process weight (total weight of all materials introduced into the emission unit including fluxing agents and alloys) in lbs/hour. If the process weight equals, or is less, than 0.5 ton/hour the particulate matter emission limitation shall be 2.34 lbs/hr. When this emission limitation exceeds the emission limitation specified in Condition d) below, then it is superseded by the emission limitation specified in Condition d) below.

SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- b) Self-imposed limitation to preclude 401 KAR 51:017, PSD:
 - i. Combined hourly PM₁₀ emissions shall not exceed 3.4 lbs/hr; and
 - ii. Combined sulfur dioxide emissions shall not exceed 3.25 tons/month.
- c) Pursuant to 401 KAR 59:105:

SO₂ in the process gas stream shall not exceed 28.63 grains per 100 dscf at zero percent oxygen.
- d) The following conditions shall apply to the Melting/Holding Furnaces (S8 and S9): [40 CFR Part 63.1505]
 - i. The following limits must be used to determine emission standards for each existing SAPU within the secondary aluminum processing facility. [40 CFR Part 63.1505 (i)]
 - A) The PM emissions from each furnace shall not exceed 0.4 pounds per ton of feed; and [40 CFR Part 63.1505 (i)(1)]
 - B) The HCl emissions from each furnace shall not exceed 0.40 pounds per ton of feed; and [40 CFR Part 63.1505 (i)(4)]
 - C) The Dioxin/Furan (D/F) emissions from each furnace shall not exceed 2.1×10^{-4} gr of D/F TEQ per ton of feed. [40 CFR 63.1505 (i)(3)]
 - D) Emissions standards may be determined by applying group 1 furnace limits on the basis of aluminum production weight rather than on the basis of feed/charge.
 - ii. Emission limits shall be calculated for each SAPU using the following equations: [40 CFR Part 63.1505(i)(6)]
 - A) For each secondary aluminum processing unit, the permittee shall not discharge any 3-day, 24-hour rolling average emissions of PM in excess of: [40 CFR Part 63.1505 (k)(1)]

$$L_{cPM} = \frac{\sum_{i=1}^n (L_{tiPM} T_{ti})}{\sum_{i=1}^n (T_{ti})} \quad (\text{Eq. 1})$$

Where,

L_{tiPM} = The PM emission limit for individual unit i in the secondary aluminum processing unit [kg/Mg (lbs/ton) of feed];

T_{ti} = The feed/charge rate for individual emission unit i;

L_{cPM} = The PM emission limit for the secondary aluminum processing unit; and

n = The number of units in the secondary aluminum processing unit.

- B) For each secondary aluminum processing unit, the permittee shall not discharge any 3-day, 24-hour rolling average emissions of HCl in excess of: [40 CFR Part 63.1505 (k)(2)]

SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

$$L_{cHCl} = \frac{\sum_{i=1}^n (L_{tiHCl} \chi T_{ti})}{\sum_{i=1}^n (T_{ti})} \quad (\text{Eq. 2})$$

Where,

L_{tiHCl} = The HCl emission limit for individual unit i in the secondary aluminum processing unit [kg/Mg (lbs/ton) of feed];

L_{cHCl} = The HCl emission limit for the secondary aluminum processing unit; and

n = The number of units in the secondary aluminum processing unit.

- C) For each secondary aluminum processing unit, the permittee shall not discharge any 3-day, 24-hour rolling average emissions of D/F in excess of: [40 CFR Part 63.1505 (k)(3)]

$$L_{cD/F} = \frac{\sum_{i=1}^n (L_{tiD/F} \chi T_{ti})}{\sum_{i=1}^n (T_{ti})} \quad (\text{Eq. 3})$$

Where,

$L_{tiD/F}$ = The D/F emission limit for individual unit i in the secondary aluminum processing unit [$\mu\text{g TEQ/Mg}$ (gr TEQ/ton) of feed];

$L_{cD/F}$ = The D/F emission limit for the secondary aluminum processing unit; and

n = The number of units in the secondary aluminum processing unit.

Pollutant	SAPU ₁ Emission limit	Unit
L_{cPM}	0.192	Lb/ton
L_{cHCl}	0.208	Lb/ton

Notes:

- The Secondary Aluminum Processing unit (SAPU) at this facility is comprised of the individual group 1 furnaces identified as emission units 01(S1), 02(S2), 21 (S8, S9), and 23 (three in-line fluxers).

SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**Compliance Demonstration Method:**

- a) To provide reasonable assurance that the visible emission limitations are being met the permittee shall:
 - i. perform from each stack or vent, opacity readings using Reference Method 9 each calendar quarter, or more frequently if requested by the Division. Opacity readings shall be conducted while the emission units are operating.
 - ii. perform a qualitative visual observation of the opacity of emissions from each stack/vent on a daily basis and maintain a log of the observation. The log shall note:
 - A. whether any air emissions (except for water vapor) were visible from the vent/stack, and
 - B. all emission points from which visible emissions occurred.
 - iii. determine the opacity of emissions by Reference Method 9 if visible emissions are observed from any stack/vent.
- b) To provide reasonable assurance that the particulate matter emission limitations specified in 401 KAR 59:010 are met, the permittee shall monitor the amounts and types of process weight added to each emissions unit. The process weight rate shall be determined by dividing the tons of material added to each emission unit in a calendar month divided by total hours the unit operated that month.

The average particulate emissions shall be calculated as follows:

$$PE = PW \times PEF$$

Where PE = particulate emissions in average lbs/hr, PW = process weight in tons/hr, and PEF = particulate emission factor in lbs/ton of process weight.

The particulate emission factors shall be the number determined from the compliance test required in testing requirements below or other emission test or emission factors approved by the Division.

- c) Compliance with emission limits listed in **Emissions Limitations** d)ii may be shown by demonstrating that each emission unit within the SAPU is in compliance with the applicable emission limits listed in **Emissions Limitations** d)i

3. Testing Requirements:

- a) The permittee shall determine compliance with applicable emission limits and standards using methods in Appendix A to 40 CFR 60, as listed in §63.1511(c).
- b) The testing required by **Testing Requirements** a) shall be repeated at least once every five (5) years from the date of the prior (initial) performance test. The performance test shall be done to demonstrate compliance with each applicable emission, equipment, work practice, or operational standard for each affected source and emission unit. [40 CFR Part 63.1511(e)]

SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Note: Tested on April 30-May 2, 2007 and March 20-23, 2007

- c) Testing of representative emission units. With the prior approval of the permitting authority, an owner or operator may utilize emission rates obtained by testing a particular type of group 1 furnace which is not controlled by any add-on control device, or by testing an in-line flux box which is not controlled by any add-on control device, to determine the emission rate for other units of the same type at the same facility. Such emission test results may only be considered to be representative of other units if all of the following criteria are satisfied: [40 CFR Part 63.1511(f)]
 - i. The tested emission unit must use feed materials and charge rates which are comparable to the emission units that it represents;
 - ii. The tested emission unit must use the same type of flux materials in the same proportions as the emission units it represents;
 - iii. The tested emission unit must be operated utilizing the same work practices as the emission units that it represents;
 - iv. The tested emission unit must be of the same design as the emission units that it represents; and
 - v. The tested emission unit must be tested under the highest load or capacity reasonably expected to occur for any of the emission units that it represents.

4. Specific Monitoring Requirements:

- a) To provide reasonable assurance that the sulfur dioxide emission limitations are being met, the permittee shall monitor monthly the amount, sulfur content, and the type of fuel oil used.
- b) The permittee shall prepare and implement for each new or existing affected source and emission unit, a written operation, maintenance, and monitoring (OM&M) plan. The OM&M Plan shall include: [40 CFR Part 63.1510 (b)]
 - i. Process parameters to be monitored to determine compliance, along with established operating levels or ranges, as applicable, for each process and control device.
 - ii. A monitoring schedule for each furnace.
 - iii. Procedures for the proper operation and maintenance of each of the Melting/Holding Furnaces (S8 and S9) to meet the applicable emission limits or standards in §63.1505.
 - iv. Procedures for the proper operation and maintenance of monitoring devices or systems used to determine compliance, including calibration and certification of accuracy of each monitoring device, at least once every 6 months, according to the manufacturer's instructions.
 - v. Procedures for monitoring process parameters used for determining charge/feed (or throughput) weight if a measurement device is not used.
 - vi. Corrective actions to be taken when process or operating parameters or add-on control device parameters deviate from the value or range established pursuant to paragraph b)i. of this condition, including:
 - A. Procedures to determine and record the cause of an deviation or excursion, and the time the deviation or excursion began and ended; and
 - B. Procedures for recording the corrective action taken, the time corrective action

SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

was initiated, and the time/date corrective action was completed.

- vii. A maintenance schedule for each process that is consistent with the manufacturer's instructions and recommendations for routine and long-term maintenance.
 - viii. Documentation of the work practice and pollution prevention measures used to achieve compliance with the applicable emission limits and a site-specific monitoring plan as required in §63.1510(o) for each of the Melting/Holding Furnaces (S8 and S9).
- c) The permittee shall inspect the labels for each of the Melting/Holding Furnaces (S8 and S9) at least once per calendar month to confirm that posted labels as required by the operational standard in §63.1506(b) are intact and legible. [40 CFR Part 63.1510 (c)]
- d) For each of the Melting/Holding Furnaces (S8 and S9) subject to an emission limit in kg/Mg (lb/ton) or µg/Mg (gr/ton) of feed/charge, the permittee shall install, calibrate, operate, and maintain a device to measure and record the total weight of feed/charge to, or the aluminum production from, the affected source or emission unit over the same operating cycle or time period used in the performance test. Feed/charge or aluminum production within SAPUs must be measured and recorded on an emission unit-by-emission unit basis. As an alternative to a measurement device, the permittee may use a procedure acceptable to the Division to determine the total weight of feed/charge or aluminum production to the affected source or emission unit. [40 CFR Part 63.1510 (e)]
- e) For each of the Melting/Holding Furnaces (S8 and S9), the permittee shall: [40 CFR Part 63.1510 (j)]
- i. Install, calibrate, operate, and maintain a device to continuously measure and record the weight of gaseous or liquid reactive flux injected to each of the Melting/Holding Furnaces (S8 and S9). For each monitoring device:
 - A. The monitoring system shall record, for each 15-minute block period during each operating cycle or time period used in the performance test during which reactive fluxing occurs, the time, weight, and type of flux for each addition of solid reactive flux;
 - B. The accuracy of the weight measurement device must be ± 1 percent of the weight of the reactive component of the flux being measured. The permittee may apply to the Division for permission to use a weight measurement device of alternative accuracy in cases where the reactive flux flow rates are so low as to make the use of a weight measurement device of ± 1 percent impracticable. A device of alternative accuracy will not be approved unless the permittee provides assurance through data and information that the affected source will meet the relevant emission standards; and
 - C. The permittee shall verify the calibration of the weight measurement device in accordance with the schedule specified by the manufacturer, or if no calibration schedule is specified, at least once every 6 months.
 - ii. Calculate and record the gaseous or liquid reactive flux injection rate (kg/Mg or lb/ton) for each operating cycle or time period used in the performance test using the procedure in §63.1512(o);

SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- iii. Record, for each 15-minute block period during each operating cycle or time period used in the performance test during which reactive fluxing occurs, the time, weight, and type of flux for each addition of;
 - A. Gaseous or liquid reactive flux other than chlorine; and
 - B. Solid reactive flux.
 - iv. Calculate and record the total reactive flux injection rate for each operating cycle or time period used in the performance test using the procedure in §63.1512(o).
 - v. The permittee performing reactive fluxing may apply to the Division for approval of an alternative method for monitoring and recording the total reactive flux addition rate based on monitoring the weight or quantity of reactive flux per ton of feed/charge each operating cycle or time period used in the performance test. An alternative monitoring method will not be approved unless the permittee provides assurance through data and information that the affected source will meet the relevant emission standards on a continuous basis.
- f) The permittee shall develop for each of the Melting/Holding Furnaces (S8 and S9),
- i. Develop in consultation with the Division, a written site-specific monitoring plan. The site-specific monitoring plan must be submitted to the Division as part of the OM&M Plan. [40 CFR Part 63.1510 (o)(1)]
 - ii. The site-specific monitoring plan must document each work practice, equipment/design practice, pollution prevention practice, or other measure used to meet the applicable emission standards. [40 CFR Part 63.1510 (o)(2)]
 - iii. The site-specific monitoring plan must include provisions for unit labeling as required in §63.1510(c), feed/charge weight measurement (or production weight measurement) as required in §63.1510(e), and flux weight measurement as required in §63.1510(j). [40 CFR Part 63.1510 (o)(3)]
 - iv. If a site-specific monitoring plan includes a scrap inspection program for monitoring the scrap contaminant level of furnace feed/charge materials, the plan must include provisions for the demonstration and implementation of the program in accordance with all applicable requirements in **Specific Monitoring Requirements** g) below. [40 CFR Part 63.1510 (o)(7)]
 - v. If a site-specific monitoring plan includes a calculation method for monitoring the scrap contaminate level of furnace feed/charge materials, the plan must include provisions for the demonstration and implementation of the program in accordance with all applicable requirements in **Specific Monitoring Requirements** h). [40 CFR Part 63.1510 (o)(8)]
- g) For Melting/Holding Furnaces (S8 & S9), the furnace charge materials not qualifying as clean charge shall be subject to a site-specific scrap monitoring plan. If the site-specific scrap monitoring plan calls for a scrap inspection program, the following program shall be implemented pursuant to 40 CFR Part 63.1510 (p):
- i. A proven method for collecting representative samples and measuring the oil and coatings content of scrap samples;
 - ii. A scrap inspector training program;

SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- iii. An established correlation between visual inspection and physical measurement of oil and coatings content of scrap samples;
 - iv. Periodic physical measurements of oil and coatings content of randomly-selected scrap samples and comparison with visual inspection results;
 - v. A system for assuring that only acceptable scrap is charged to an affected group 1 furnace; and
 - vi. Recordkeeping requirements to document conformance with plan requirements.
- h) If Melting/Holding Furnaces (S8 & S9) are dedicated to processing a distinct type of furnace feed/charge composed of scrap with a uniform composition, the permittee may include a program in the site-specific monitoring plan for determining, monitoring, and certifying the scrap contaminate level using a calculation method rather than a scrap inspection program. A scrap contaminate monitoring program using a calculation method must include, 40 CFR Part 63.1510 (q):
- i. Procedures for the characterization and documentation of the contaminant level of the scrap prior to the performance test.
 - ii. Limitations on the furnace feed/charge to scrap of the same composition as that used in the performance test. If the performance test was conducted with a mixture of scrap and clean charge, limitations on the proportion of scrap in the furnace feed/charge to no greater than the proportion used during the performance test.
 - iii. Operation, monitoring, recordkeeping, and reporting requirements to ensure that no scrap with a contaminant level higher than that used in the performance test is charged to the furnace.
- i) Site-specific information for secondary aluminum processing units shall be included, within the OM&M Plan prepared in accordance with §63.1510(b), and include the following information: [40 CFR Part 63.1510 (s)]
- i. The identification of each emission unit in the secondary aluminum processing unit;
 - ii. The specific control technology or pollution prevention measure to be used for each emission unit in the secondary aluminum processing unit and the date of its installation or application;
 - iii. The emission limit calculated for each secondary aluminum processing unit and performance test results with supporting calculations demonstrating initial compliance with each applicable emission limit;
 - iv. Information and data demonstrating compliance for each emission unit with all applicable design, equipment, work practice or operational standards of this subpart; and
 - v. The monitoring requirements applicable to each emission unit in a secondary aluminum processing unit and the monitoring procedures for daily calculation of the 3-day, 24-hour rolling average using the procedure in §63.1510(t).
 - vi. The SAPU compliance procedures within the OM&M Plan may not contain any of the following provisions:
 - A. Any averaging among emissions of differing pollutants;
 - B. The inclusion of any affected sources other than emission units in a secondary aluminum processing unit;
 - C. The inclusion of any emission unit while it is shutdown; or

SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- D. The inclusion of any periods of startup, shutdown, or malfunction in emission calculations.
- vii. To revise the SAPU compliance provisions within the OM&M Plan prior to the end of the permit term, the permittee shall submit a request to the Division containing the information required by paragraphs i)i. through v. of this condition and obtain approval of the Division prior to implementing any revisions.
- j) For each secondary aluminum processing unit, the 3-day and 24-hour rolling average emissions of PM, HCl, and D/F shall be calculated and recorded on a daily basis using the following equation. If compliance is based on weight of aluminum produced by the emission unit rather than weight of material charged to the emission unit, all performance test emission results and all calculations must be conducted on the aluminum production weight basis. [40 CFR Part 63.1510(t)]

$$E_{\text{Day}} = \frac{\sum_{i=1}^n (ER_i \times T_i)}{\sum_{i=1}^n T_i}$$

Where,

E_{Day} = The daily PM, HCl, or D/F emission rate for the secondary aluminum processing unit for the 24-hour period.

T_i = The total amount of feed, or aluminum produced, for emission unit i for the 24-hour period (tons).

ER_i = The measured emission rate for emission unit i as determined in the performance test (lb/ton of feed/charge).

n = The number of emission units in the secondary aluminum processing.

- k) As demonstrated in the facility's approved OM&M Plan and as an alternative to §63.1510(t), the permittee may demonstrate, through performance tests as approved in the facility's approved OM&M Plan, that each individual emission unit within the secondary aluminum production unit is in compliance with the applicable emission limits for the emission unit. [40 CFR Part 63.1510(u)]
5. **Specific Record Keeping Requirements:**
- a) Records shall be maintained of the daily visual observations, the calendar quarter observations by Reference Method 9, the amounts and types of process weight added to each emissions unit and the hours of operation.
- b) The permittee shall maintain records and certify every 6 months that only fluoride free flux is used in accordance with **Operating Limitations** b).
- c) As required by §63.10(b), the permittee shall maintain files of all information (including all reports and notifications) required by 40 CFR 63, Subpart A and the records specified in **Specific Monitoring Requirements** as required by Subpart RRR. [40 CFR Part 63.1517 (a)]

SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- i. The permittee shall retain each record for at least 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. The most recent 2 years of records must be retained at the facility. The remaining 3 years of records may be retained off site;
 - ii. The permittee may retain records on microfilm, computer disks, magnetic tape, or microfiche; and
 - iii. The permittee may report required information on paper or on a labeled computer disk using commonly available and EPA-compatible computer software.
- d) The permittee shall maintain records of the following for the Melting/Holding Furnaces (S8 and S9): [40 CFR Part 63.1517 (b)]
- i. For each furnace, records of 15-minute block of solid reactive flux injection during each operating cycle or time period used in the performance test during which reactive flux fluxing occurs. Records are to include time, weight, type of flux and calculations of the total reactive flux injection rate for each operating cycle or time period used in the performance test using the procedure in §63.1512(o); [40 CFR Part 63.1517 (b)(5)]
 - ii. For each continuous monitoring system, records required by §63.10(c); [40 CFR Part 63.1517 (b)(6)]
 - iii. For each furnace that is subject to an emission standard in kg/Mg (lb/ton) of feed/charge, records of feed/charge (or throughput) weights for each operating cycle or time period used in the performance test; [40 CFR Part 63.1517 (b)(7)]
 - iv. Approved site-specific monitoring plan for a group 1 furnace without add-on control devices with records documenting conformance with the plan; [40 CFR 63.1517 (b)(8)]
 - v. Records of monthly inspections for proper unit labeling for each affected source and emission unit subject to labeling requirements; [40 CFR Part 63.1517 (b)(13)]
 - vi. Records for any approved alternative monitoring or test procedure; [40 CFR Part 63.1517 (b)(15)]
 - vii. Current copy of all required plans, including any revisions, with records documenting conformance with the applicable plan, including: [40 CFR Part 63.1517 (b)(16)]
 - A. Startup, shutdown, and malfunction plan;
 - B. OM&M Plan; and
 - C. Site-specific secondary aluminum processing unit emissions plan (if applicable).
 - viii. Records of total charge weight, or if compliance is on the basis of aluminum production, total aluminum produced for each 24-hour period and calculations of 3-day, 24-hour rolling average emissions. [40 CFR Part 63.1517 (b)(17)]

6. Specific Reporting Requirements:

- a) Any exceedance over the opacity, particulate, SO₂ emissions as stated in **Emission Limitations** a) through c), shall be reported to the Division as specified in **Section F 6**. The company shall also certify to the Division, annually, that a daily visible emission survey is conducted and the specified records are being kept for this emission point. If more than two exceedances occur in any rolling six months, the permittee shall submit to

SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

the Division's Owensboro Regional Office no later than 30 days from the second exceedance a corrective action plan for the Division's approval.

- b) Startup, shutdown and malfunction plan/report: The permittee shall develop and implement a written plan that contains specific procedures to be followed for operating and maintaining the source during periods of startup, shutdown, and malfunction, and a program of corrective action for malfunctioning process and air pollution control equipment used to comply with the standard. The permittee shall also keep records of each event as required by §63.10(b) and record and report if an action taken during a startup, shutdown, or malfunction is not consistent with the procedures in the plan as described in §63.6(e)(3). In addition to the information required in §63.6(e)(3), the plan must include: [40 CFR Part 63.1516 (a)]
 - i. Procedures to determine and record the cause of the malfunction and the time the malfunction began and ended; and
 - ii. Corrective actions to be taken in the event of a malfunction of a process or control device, including procedures for recording the actions taken to correct the malfunction or minimize emissions.
- c) Excess emissions/summary report: The permittee shall submit reports as specified in **Section F 6**. Each report must contain the information specified in §63.10(c). When no deviations of parameters have occurred, the permittee shall submit a report stating that no excess emissions occurred during the reporting period. [40 CFR Part 63.1516 (b)]
 - i. A report must be submitted if any of these conditions occur during a 6-month reporting period: [40 CFR Part 63.1516 (b)(1)]
 - A. An excursion of a compliant process or operating parameter value or range (e.g., total reactive chlorine flux injection rate, definition of acceptable scrap, or other approved operating parameter); [40 CFR Part 63.1516 (b)(1)(iv)]
 - B. An action taken during a startup, shutdown, or malfunction was not consistent with the procedures in the plan as described in §63.6(e)(3); [40 CFR Part 63.1516 (b)(1)(v)]
 - C. An affected source (including an emission unit in a secondary aluminum processing unit) was not operated according to the requirements of subpart RRR; or [40 CFR Part 63.1516 (b)(1)(vi)]
 - D. A deviation from the 3-day, 24-hour rolling average emission limit for a secondary aluminum processing unit. [40 CFR Part 63.1516 (b)(1)(vii)]
 - ii. The permittee shall submit the results of any performance test conducted during the reporting period, including one complete report documenting test methods and procedures, process operation, and monitoring parameter ranges or values for each test method used for a particular type of emission point tested. [40 CFR Part 63.1516 (b)(3)]
- d) For the purpose of annual certifications of compliance required by **Section F 9**., the permittee shall certify continuing compliance based upon, but not limited to, the following conditions: [40 CFR Part 63.1516 (c)]

SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- i Any period of excess emissions, as defined in **Specific Reporting Requirements** c)i., that occurred during the year were reported as required by subpart RRR; and
- ii All monitoring, recordkeeping, and reporting requirements were met during the year.

SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**23 (-) Three (3) In-line Fluxers****Description:**

Three (3) in-line fluxers using metal purifier that utilizes chlorine gas mixed with argon.

Fluxer # 1, located at Rod Mill #1, was constructed in 2003.

Fluxer # 2, located at Rod Mill #2, was constructed in 2001.

Fluxer # 3, located at Rod Mill #3, was constructed in 1999.

APPLICABLE REGULATIONS:

401 KAR 59:010, New process operations

40 CFR 63, Subpart RRR - *National Emission Standards for Hazardous Air Pollutant Emissions for Secondary Aluminum Production*

401 KAR 63:002, Section 3(1)(eee) - *40 C.F.R. Part 63 National Emission Standards for Hazardous Air Pollutants, Subpart RRR incorporated by reference*

1. Operating Limitations:

- a) The provisions of 40 CFR Part 63, Subpart A - General Provisions, which are incorporated by reference in 401 KAR 63:002 Section 3 (a), apply to the three (3) In-line fluxers except when otherwise specified in 40 CFR Part 63, Subpart RRR. [40 CFR Part 63, Subpart A]
- b) The permittee shall post an easily visible label that identifies the type of affected emission unit, the emission limits and means of compliance on the three (3) fluxers. [40 CFR Part 63.1506 (b)]
- c) For each of the three (3) fluxers, the permittee shall: [40 CFR Part 63.1506 (d)]
 - i. Except as provided in paragraph c)iii. of this section, install and operate a device that measures and records or otherwise determine the weight of feed/charge (or throughput) for each operating cycle or time period used in the performance test; and
 - ii. Operate each weight measurement system or other weight determination procedure in accordance with the OM&M Plan.
 - iii. The permittee may chose to measure and record aluminum production weight from an affected source or emission unit rather than feed/charge weight to an affected source or emission unit, provided that:
 - A. The aluminum production weight, rather than feed/charge weight is measured and recorded for all emission units within a SAPU; and
 - B. All calculations to demonstrate compliance with the emission limits for SAPUs are based on aluminum production weight rather than feed/charge weight.

2. Emission Limitations:

- a) Pursuant to Regulation 401 KAR 59:010:
 - i. Visible emissions shall not equal or exceed 20 percent opacity, as determined with Reference Method 9, Appendix A, 40 CFR 60.
 - ii. Hourly particulate emissions, as measured by Reference Method 5, Appendix A, 40 CFR 60, averaged over three hours or the minimum time specified, shall not exceed the limit calculated by the following formula:

SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

$$E = 3.59 P^{0.62}$$

Where P is the process weight (total weight of all materials introduced into the emission unit including fluxing agents and alloys) in lbs/hour. If the process weight equals, or is less, than 0.5 ton/hour the particulate matter emission limitation shall be 2.34 lbs/hr. When this emission limitation exceeds the emission limitation specified in Condition b) below, then it is superseded by the emission limitation specified in Condition b) below.

- b) The following conditions shall apply to the in-line fluxers [40 CFR Part 63.1505]
- i. The following limits must be used to determine emission standards for each new SAPU within the secondary aluminum processing facility. {40 CFR Part 63.1505 (j)}
 - A) The PM emissions from each in-line fluxer shall not exceed 0.01 pounds per ton of feed; and [40 CFR Part 63.1505 (j)(2)]
 - B) The HCl emissions from each in-line fluxer shall not exceed 0.04 pounds per ton of feed. [40 CFR Part 63.1505 (j)(1)]
 - C) Emissions standards may be determined by applying group 1 in-line fluxer limits on the basis of the aluminum production weight in each in-line fluxer, rather than on the basis of feed/charge.
 - ii. For each secondary aluminum processing unit, the permittee shall not discharge any 3-day, 24-hour rolling average emissions of PM emissions in excess of: [40 CFR Part 63.1505 (k)(1)]

$$L_{cPM} = \frac{\sum_{i=1}^n (L_{tiPM} T_{ti})}{\sum_{i=1}^n (T_{ti})} \quad (\text{Eq. 1})$$

Where,

L_{tiPM} = The PM emission limit for individual unit i in the secondary aluminum processing unit [kg/Mg (lbs/ton) of feed];

T_{ti} = The feed/charge rate for individual emission unit i;

L_{cPM} = The PM emission limit for the secondary aluminum processing unit; and

n = The number of units in the secondary aluminum processing unit.

- iii. For each secondary aluminum processing unit, the permittee shall not discharge any 3-day, 24-hour rolling average emissions of HCl in excess of: [40 CFR Part 63.1505 (k)(2)]

$$L_{cHCl} = \frac{\sum_{i=1}^n (L_{tiHCl} T_{ti})}{\sum_{i=1}^n (T_{ti})} \quad (\text{Eq. 2})$$

SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Where,

L_{tiHCl} = The HCl emission limit for individual unit i in the secondary aluminum processing unit [kg/Mg (lbs/ton) of feed;

L_{cHCl} = The HCl emission limit for the secondary aluminum processing unit; and

n = The number of units in the secondary aluminum processing unit.

Pollutant	SAPU ₁ Emission limit	Unit
L_{cPM}	0.192	Lb/ton
L_{cHCl}	0.208	Lb/ton

Notes:

- 1 The Secondary Aluminum Processing unit (SAPU) at this facility is comprised of the individual group 1 furnaces identified as emission units 01(S1), 02(S2), 21 (S8, S9), and 23 (three in-line fluxers).

Compliance Demonstration Method:

- a) To provide reasonable assurance that the visible emission limitations are being met the permittee shall:
 - i. perform from each stack or vent, opacity readings using Reference Method 9 each calendar quarter, or more frequently if requested by the Division. Opacity readings shall be conducted while the emission units are operating.
 - ii. perform a qualitative visual observation of the opacity of emissions from each stack/vent on a daily basis and maintain a log of the observation. The log shall note:
 - A. whether any air emissions (except for water vapor) were visible from the vent/stack, and
 - B. all emission points from which visible emissions occurred.
 - iii. determine the opacity of emissions by Reference Method 9 if visible emissions are observed from any stack/vent.
- b) To provide reasonable assurance that the particulate matter emission limitations specified in 401 KAR 59:010 are met, the permittee shall monitor the amounts and types of process weight added to each emissions unit. The process weight rate shall be determined by dividing the tons of material added to each emission unit in a calendar month divided by total hours the unit operated that month.

The average particulate emissions shall be calculated as follows:

$$PE = PW \times PEF$$

Where PE = particulate emissions in average lbs/hr, PW = process weight in tons/hr, and PEF = particulate emission factor in lbs/ton of process weight.

SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

The particulate emission factors shall be the number determined from the compliance test required in testing requirements below or other emission test or emission factors approved by the Division.

- c) Compliance with emission limits listed in **Emissions Limitations** b)ii. may be shown by demonstrating that each emission unit within the SAPU is in compliance with the applicable limits listed in **Emissions Limitations** b)i.

3. Testing Requirements:

- a) The permittee shall determine compliance with applicable emission limits and standards using methods in Appendix A to 40 CFR 60, as listed in §63.1511(c).
- b) The testing required by **Testing Requirements** a) shall be repeated at least once every five (5) years from the date of the prior (initial) performance test. The performance test shall be done to demonstrate compliance with each applicable emission, equipment, work practice, or operational standard for each affected source and emission unit. [40 CFR Part 63.1511(e)]

Note: ACD 2 and 3 were tested during month of March thru July of 2007

- c) Testing of representative emission units. With the prior approval of the permitting authority, an owner or operator may utilize emission rates obtained by testing a particular type of group 1 furnace which is not controlled by any add-on control device, or by testing an in-line flux box which is not controlled by any add-on control device, to determine the emission rate for other units of the same type at the same facility. Such emission test results may only be considered to be representative of other units if all of the following criteria are satisfied: [40 CFR Part 63.1511(f)]
 - i. The tested emission unit must use feed materials and charge rates which are comparable to the emission units that it represents;
 - ii. The tested emission unit must use the same type of flux materials in the same proportions as the emission units it represents;
 - iii. The tested emission unit must be operated utilizing the same work practices as the emission units that it represents;
 - iv. The tested emission unit must be of the same design as the emission units that it represents; and
 - v. The tested emission unit must be tested under the highest load or capacity reasonably expected to occur for any of the emission units that it represents.

4. Specific Monitoring Requirements:

- a) The permittee shall prepare and implement for each new or existing affected source and emission unit, a written operation, maintenance, and monitoring (OM&M) plan. The OM&M Plan shall include: [40 CFR Part 63.1510 (b)]
 - i. Process parameters to be monitored to determine compliance, along with established operating levels or ranges, as applicable, for each process and control device.
 - ii. A monitoring schedule for each fluxer.

SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- iii. Procedures for the proper operation and maintenance of each of the three (3) In-line fluxers to meet the applicable emission limits or standards in §63.1505.
 - iv. Procedures for the proper operation and maintenance of monitoring devices or systems used to determine compliance, including calibration and certification of accuracy of each monitoring device, at least once every 6 months, according to the manufacturer's instructions.
 - v. Procedures for monitoring process parameters used for determining charge/feed (or throughput) weight if a measurement device is not used.
 - vi. Corrective actions to be taken when process or operating parameters or add-on control device parameters deviate from the value or range established pursuant to paragraph a)i. of this condition, including:
 - A. Procedures to determine and record the cause of an deviation or excursion, and the time the deviation or excursion began and ended; and
 - B. Procedures for recording the corrective action taken, the time corrective action was initiated, and the time/date corrective action was completed.
 - vii. A maintenance schedule for each process that is consistent with the manufacturer's instructions and recommendations for routine and long-term maintenance.
 - viii. Documentation of the work practice and pollution prevention measures used to achieve compliance with the applicable emission limits and a site-specific monitoring plan as required in §63.1510(o) for each of the three (3) In-line fluxers.
- b) The permittee shall inspect the labels for each of the three (3) In-line fluxers at least once per calendar month to confirm that posted labels as required by the operational standard in §63.1506(b) are intact and legible. [40 CFR Part 63.1510 (c)]
- c) For each of the In-line fluxers subject to an emission limit in kg/Mg (lb/ton) or µg/Mg (gr/ton) of feed/charge, the permittee shall install, calibrate, operate, and maintain a device to measure and record the total weight of feed/charge to, or the aluminum production from, the affected source or emission unit over the same operating cycle or time period used in the performance test. Feed/charge or aluminum production within SAPUs must be measured and recorded on an emission unit-by-emission unit basis. As an alternative to a measurement device, the permittee may use a procedure acceptable to the Division to determine the total weight of feed/charge or aluminum production to the affected source or emission unit. [40 CFR Part 63.1510 (e)]
- d) For each of the three (3) In-line fluxers, the permittee shall: [40 CFR Part 63.1510 (j)]
- i. Install, calibrate, operate, and maintain a device to continuously measure and record the weight of gaseous or liquid reactive flux injected to each of the three (3) In-line fluxers. For each monitoring device:
 - A. The monitoring system shall record, for each 15-minute block period during each operating cycle or time period used in the performance test during which reactive fluxing occurs, the time, weight, and type of flux for each addition of solid reactive flux.
 - B. The accuracy of the weight measurement device must be ±1 percent of the weight of the reactive component of the flux being measured. The permittee may

SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

apply to the Division for permission to use a weight measurement device of alternative accuracy in cases where the reactive flux flow rates are so low as to make the use of a weight measurement device of ± 1 percent impracticable. A device of alternative accuracy will not be approved unless the permittee provides assurance through data and information that the affected source will meet the relevant emission standards.

- C. The permittee shall verify the calibration of the weight measurement device in accordance with the schedule specified by the manufacturer, or if no calibration schedule is specified, at least once every 6 months;
 - ii. Calculate and record the gaseous or liquid reactive flux injection rate (kg/Mg or lb/ton) for each operating cycle or time period used in the performance test using the procedure in §63.1512(o).
 - iii. Record, for each 15-minute block period during each operating cycle or time period used in the performance test during which reactive fluxing occurs, the time, weight, and type of flux for each addition of:
 - A. Gaseous or liquid reactive flux other than chlorine; and
 - B. Solid reactive flux.
 - iv. Calculate and record the total reactive flux injection rate for each operating cycle or time period used in the performance test using the procedure in §63.1512(o).
 - v. The permittee performing reactive fluxing may apply to the Division for approval of an alternative method for monitoring and recording the total reactive flux addition rate based on monitoring the weight or quantity of reactive flux per ton of feed/charge for each operating cycle or time period used in the performance test. An alternative monitoring method will not be approved unless the permittee provides assurance through data and information that the affected source will meet the relevant emission standards on a continuous basis.
- e) For each secondary aluminum processing unit, the 3-day and 24-hour rolling average emissions of PM, and HCl shall be calculated and recorded on a daily basis using the following equation. If compliance is based on weight of aluminum produced by the emission unit rather than weight of material charged to the emission unit, all performance test emission results and all calculations must be conducted on the aluminum production weight basis. [40 CFR Part 63.1510(t)]

$$E_{\text{Day}} = \frac{\sum_{i=1}^n (ER_i \times T_i)}{\sum_{i=1}^n T_i}$$

Where,

E_{Day} = The daily PM or HCl emission rate for the secondary aluminum processing unit for the 24-hour period.

T_i = The total amount of feed, or aluminum produced, for emission unit i for the 24-hour period (tons).

ER_i = The measured emission rate for emission unit i as determined in the performance test (lb/ton of feed/charge).

SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

n = The number of emission units in the secondary aluminum processing.

- f) As demonstrated in the facility's approved OM&M Plan and as an alternative to §63.1510(t), the permittee may demonstrate, through performance tests, that each individual emission unit within the secondary aluminum production unit is in compliance with the applicable emission limits for the emission unit. [40 CFR Part 63.1510(u)]
- g) The permittee is allowed to monitor the bar casting rate as an alternative monitoring parameter for the feed/charge rate to each in-line fluxer. The bar casting rate shall be monitored on a continuous basis, and recorded as a 15-minute block average. For more details, see the OM&M plan.
- h) The permittee is allowed under 40 CFR Part 63.1510(j)(5), to monitor the total reactive flux injection rate for ACD3 over a three hour period, instead of the 8 hour period on a continuous basis, and recorded as a 15-minute block average. For more details, see the OM&M Plan.

5. Specific Recordkeeping Requirements

- a) Records shall be maintained of the daily visual observations, the calendar quarter observations by Reference Method 9, the amounts and types of process weight added to each emissions unit and the hours of operation.
- b) As required by §63.10(b), the permittee shall maintain files of all information (including all reports and notifications) required by 40 CFR 63, Subpart A and the records specified in **Specific Monitoring Requirements**, as required by Subpart RRR. [40 CFR Part 63.1517 (a)]
 - i. The permittee shall retain each record for at least 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. The most recent 2 years of records must be retained at the facility. The remaining 3 years of records may be retained off site;
 - ii. The permittee may retain records on microfilm, computer disks, magnetic tape, or microfiche; and
 - iii. The permittee may report required information on paper or on a labeled computer disk using commonly available and EPA-compatible computer software.
- c) The permittee shall maintain records of the following for the three (3) In-line fluxers: [40 CFR Part 63.1517 (b)]
 - i. For each fluxer, records of 15-minute block of liquid or gaseous reactive flux injection during each operating cycle or time period used in the performance test during which reactive flux fluxing occurs. Records are to include time, weight, type of flux and calculations of the total reactive flux injection rate for each operating cycle or time period used in the performance test using the procedure in §63.1512(o). [40 CFR Part 63.1517 (b)(5)]
 - ii. For each continuous monitoring system, records required by §63.10(c). [40 CFR Part 63.1517 (b)(6)]

SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- iii. For each fluxer that is subject to an emission standard in kg/Mg (lb/ton) of feed/charge, records of feed/charge (or throughput) weights for each operating cycle or time period used in the performance test. [40 CFR Part 63.1517 (b)(7)]
 - iv. Records of monthly inspections for proper unit labeling for each affected source and emission unit subject to labeling requirements. [40 CFR Part 63.1517 (b)(13)]
 - v. Records for any approved alternative monitoring or test procedure. [40 CFR Part 63.1517 (b)(15)]
 - vi. Current copy of all required plans, including any revisions, with records documenting conformance with the applicable plan, including: [40 CFR Part 63.1517 (b)(16)]
 - A. Startup, shutdown, and malfunction plan;
 - B. OM&M Plan; and
 - C. Site-specific secondary aluminum processing unit emissions plan (if applicable).
 - vii. Records of total charge weight, or if compliance is on the basis of aluminum production, total aluminum produced for each 24-hour period and calculations of 3-day, 24-hour rolling average emissions. [40 CFR Part 63.1517 (b)(17)]
- d) See Section B-4. Specific Monitoring Requirements.

6. Specific Reporting Requirements:

- a) Any exceedance over the opacity and particulate emissions as stated in Emissions Limitations a), shall be reported to the Division as specified in **Section F 6**. The company shall also certify to the Division, annually, that a daily visible emission survey is conducted and the specified records are being kept for this emission point. If more than two exceedances occur in any rolling six months, the permittee shall submit to the Division, Owensboro Office no later than 30 days from the second exceedance a corrective action plan for the Division's Approval.
- b) Startup, shutdown and malfunction plan/report: The permittee shall develop and implement a written plan that contains specific procedures to be followed for operating and maintaining the source during periods of startup, shutdown, and malfunction, and a program of corrective action for malfunctioning process and air pollution control equipment used to comply with the standard. The permittee shall also keep records of each event as required by §63.10(b) and record and report if an action taken during a startup, shutdown, or malfunction is not consistent with the procedures in the plan as described in §63.6(e)(3). In addition to the information required in §63.6(e)(3), the plan must include: [40 CFR Part 63.1516 (a)]
 - i. Procedures to determine and record the cause of the malfunction and the time the malfunction began and ended; and
 - ii. Corrective actions to be taken in the event of a malfunction of a process or control device, including procedures for recording the actions taken to correct the malfunction or minimize emissions.
- c) Excess emissions/summary report: The permittee shall submit semiannual reports as specified in **Section F 6**. Each report must contain the information specified in §63.10(c).

SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- When no deviations of parameters have occurred, the permittee shall submit a report stating that no excess emissions occurred during the reporting period. [40 CFR Part 63.1516 (b)]
- i. A report must be submitted if any of these conditions occur during a 6-month reporting period: [40 CFR Part 63.1516 (b)(1)]
 - A. An excursion of a compliant process or operating parameter value or range (e.g., total reactive chlorine flux injection rate, definition of acceptable scrap, or other approved operating parameter); [40 CFR Part 63.1516 (b)(1)(iv)]
 - B. An action taken during a startup, shutdown, or malfunction was not consistent with the procedures in the plan as described in §63.6(e)(3); [40 CFR Part 63.1516 (b)(1)(v)]
 - C. An affected source (including an emission unit in a secondary aluminum processing unit) was not operated according to the requirements of subpart RRR; and [40 CFR Part 63.1516 (b)(1)(vi)]
 - D. A deviation from the 3-day, 24-hour rolling average emission limit for a secondary aluminum processing unit. [40 CFR Part 63.1516 (b)(1)(vii)]
 - ii. The permittee shall submit the results of any performance test conducted during the reporting period, including one complete report documenting test methods and procedures, process operation, and monitoring parameter ranges or values for each test method used for a particular type of emission point tested. [40 CFR Part 63.1516 (b)(3)]
- d) For the purpose of annual certifications of compliance required by **Section F 9.**, the permittee shall certify continuing compliance based upon, but not limited to, the following conditions: [40 CFR Part 63.1516 (c)]
- i Any period of excess emissions, as defined in **Specific Reporting Requirements** c)i., that occurred during the year were reported as required by subpart RRR; and
 - ii All monitoring, recordkeeping, and reporting requirements were met during the year.

SECTION C - INSIGNIFICANT ACTIVITIES (CONTINUED)

The following listed activities have been determined to be insignificant activities for this source pursuant to Regulation 401 KAR 50:035, Section 5(4). While these activities are designated as insignificant the permittee shall comply with the applicable regulation and some minimal level of periodic monitoring may be necessary.

<u>Description</u>	<u>Generally Applicable Regulation</u>
1. Annealing oven #1 2.26 MMBtu/hr fired with natural gas (propane backup)	401 KAR 61:020
2. Annealing oven #2 2.26 MMBtu/hr fired with natural gas (propane backup)	401 KAR 61:020
3. Annealing oven #3 4 MMBtu/hr fired with natural gas (propane backup)	401 KAR 59:010
4. POT heaters 1.65 MMBtu/hr fired with natural gas (propane backup)	401 KAR 59:010
5. Sow dryer #1 1.0 MMBtu/hr fired with natural gas (propane backup)	401 KAR 59:010
6. Parts washers 350 gallons, total (9 units)	401 KAR 63:020
7. Welding 10,000 lbs/yr	401 KAR 63:020
8. Settling basin 1 GPM	401 KAR 63:010
9. Oil/water separator tanks 12,000 gallons (1 tank); 4,136 gallons (2 tanks)	None
10. Kerosene storage tank 550 gallons	None
11. Diesel fuel storage tank 550 gallons	None
12. Gasoline storage tank 550 gallons	None
13. Lube oil fugitives 1 GPM	401 KAR 63:020

SECTION C - INSIGNIFICANT ACTIVITIES (CONTINUED)

	<u>Description</u>	<u>Generally Applicable Regulation</u>
14.	Two (2) propane storage tanks 30,000 gallons total capacity	401 KAR 63:020
15.	Plant roads Approximately 1 mile	401 KAR 63:010
16.	Dross storage	401 KAR 59:010
17.	Cooling towers	401 KAR 63:010
18.	Enclosed aluminum dross press with filter	401 KAR 52:020
19.	Strip Mill Annealing Oven # 1 0.5 MMBtu/hr fired with natural gas (propane backup)	401 KAR 59:010
20.	Strip Mill Annealing Oven # 2 0.5 MMBtu/hr fired with natural gas (propane backup)	401 KAR 59:010
21.	Strip Mill Annealing Oven # 3 0.5 MMBtu/hr fired with natural gas (propane backup)	401 KAR 59:010
22.	Drawing Machines #1, 2 and 3 400 GPM drawing oil, each	None
23.	Drawing Machine #4 400 GPM drawing oil	None
24.	Drawing Machine #5 400 GPM drawing oil	None
25.	Drawing Machine #6 675 GPM drawing oil	None
26.	Natural Gas fired Annealing Oven #4 6 MMBtu/hr fired with natural gas (propane backup)	401 KAR 59:010
27.	Two (2) Propane Storage Tanks – Pressurized 30,000 gallons each	None
28.	Sow dryer #2 3.621 MMBtu/hr fired with natural gas (propane backup)	401 KAR 59:010
29.	Four (4) Strip Mills	None

SECTION D - SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS

1. As required by Section 1b of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26; compliance with annual emissions and processing limitations contained in this permit, shall be based on emissions and processing rates for any twelve (12) consecutive months.
2. The SO₂, specific HAP, PM/PM₁₀, and opacity emissions as measured by applicable reference methods, or an equivalent or alternative method specified in 40 CFR Chapter I, or by a test method specified in the approved state implementation plan shall not exceed the respective limitations specified herein.
3. State origin requirements:
 - a) Chlorine emissions shall not exceed 9.37 lbs per hour; and
 - b) Fluoride content in flux used in furnaces S1 and S2 shall not exceed 10% (weight) of the flux.

Compliance Demonstration Method:

Chlorine emissions is assumed to be in compliance since NESHAP considers HCl as a surrogate for chlorine therefore, meeting NESHAP HCl limit ensures compliance with the chlorine limit.

The permittee shall maintain monthly flux used records and material safety data sheet detailing fluoride content for each flux used at each furnace. This information shall be made available to KDAQ upon request.

SECTION E - SOURCE CONTROL EQUIPMENT OPERATING REQUIREMENTS

1. Pursuant to 401 KAR 50:055, Section 2(5), at all times, including periods of startup, shutdown and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Division which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

SECTION F - MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS (CONTINUED)

1. Pursuant to Section 1b (IV)1 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26, when continuing compliance is demonstrated by periodic testing or instrumental monitoring, the permittee shall compile records of required monitoring information that include:
 - a. Date, place as defined in this permit, and time of sampling or measurements;
 - b. Analyses performance dates;
 - c. Company or entity that performed analyses;
 - d. Analytical techniques or methods used;
 - e. Analyses results; and
 - f. Operating conditions during time of sampling or measurement.
2. Records of all required monitoring data and support information, including calibrations, maintenance records, and original strip chart recordings, and copies of all reports required by the Division for Air Quality, shall be retained by the permittee for a period of five years and shall be made available for inspection upon request by any duly authorized representative of the Division for Air Quality [Sections 1b(IV) 2 and 1a(8) of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
3. In accordance with the requirements of 401 KAR 52:020 Section 3(1)h, the permittee shall allow authorized representatives of the Cabinet to perform the following during reasonable times:
 - a. Enter upon the premises to inspect any facility, equipment (including air pollution control equipment), practice, or operation;
 - b. To access and copy any records required by the permit;
 - c. Sample or monitor, at reasonable times, substances or parameters to assure compliance with the permit or any applicable requirements.Reasonable times are defined as during all hours of operation, during normal office hours, or during an emergency.
4. No person shall obstruct, hamper, or interfere with any Cabinet employee or authorized representative while in the process of carrying out official duties. Refusal of entry or access may constitute grounds for permit revocation and assessment of civil penalties.
5. Summary reports of any monitoring required by this permit, other than continuous emission or opacity monitors, shall be submitted to the Regional Office listed on the front of this permit at least every six (6) months during the life of this permit, unless otherwise stated in this permit. For emission units that were still under construction or which had not commenced operation at the end of the 6-month period covered by the report and are subject to monitoring requirements in this permit, the report shall indicate that no monitoring was performed during the previous six months because the emission unit was not in operation [Section 1b (V)1 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].

SECTION F - MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS (CONTINUED)

6. The semi-annual reports are due by January 30th and July 30th of each year. All reports shall be certified by a responsible official pursuant to 401 KAR 52:020 Section 23. All deviations from permit requirements shall be clearly identified in the reports.
7. In accordance with the provisions of 401 KAR 50:055, Section 1 the owner or operator shall notify the Regional Office listed on the front of this permit concerning startups, shutdowns, or malfunctions as follows:
 - a. When emissions during any planned shutdowns and ensuing startups will exceed the standards, notification shall be made no later than three (3) days before the planned shutdown, or immediately following the decision to shut down, if the shutdown is due to events which could not have been foreseen three (3) days before the shutdown.
 - b. When emissions due to malfunctions, unplanned shutdowns and ensuing startups are or may be in excess of the standards, notification shall be made as promptly as possible by telephone (or other electronic media) and shall submit written notice upon request.
8. The owner or operator shall report emission related exceedances from permit requirements including those attributed to upset conditions (other than emission exceedances covered by Section F.7. above) to the Regional Office listed on the front of this permit within 30 days. Other deviations from permit requirements shall be included in the semiannual report required by Section F.6 [Section 1b (V) 3, 4. of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
9. Pursuant to 401 KAR 52:020, Permits, Section 21, the permittee shall annually certify compliance with the terms and conditions contained in this permit, by completing and returning a Compliance Certification Form (DEP 7007CC) (or an alternative approved by the regional office) to the Regional Office listed on the front of this permit and the U.S. EPA in accordance with the following requirements:
 - a. Identification of the term or condition;
 - b. Compliance status of each term or condition of the permit;
 - c. Whether compliance was continuous or intermittent;
 - d. The method used for determining the compliance status for the source, currently and over the reporting period.
 - e. For an emissions unit that was still under construction or which has not commenced operation at the end of the 12-month period covered by the annual compliance certification, the permittee shall indicate that the unit is under construction and that compliance with any applicable requirements will be demonstrated within the timeframes specified in the permit.

**SECTION F - MONITORING, RECORDKEEPING, AND REPORTING
REQUIREMENTS (CONTINUED)**

- f. The certification shall be postmarked by January 30th of each year. Annual compliance certifications should be mailed to the following addresses:

Division for Air Quality
Owensboro Regional Office
3032 Alvey Park Drive W.
Owensboro, KY 42303

U.S. EPA Region IV
Air Enforcement Branch
Atlanta Federal Center
61 Forsyth St.
Atlanta, GA 30303-8960

Division for Air Quality
Central Files
200 Fair Oaks Lane, 1st Floor
Frankfort, KY 40601

10. In accordance with 401 KAR 52:020, Section 22, the permittee shall provide the Division with all information necessary to determine its subject emissions within thirty (30) days of the date the KYEIS emission survey is mailed to the permittee.
11. Results of performance test(s) required by the permit shall be submitted to the Division by the source or its representative within forty-five days, or sooner if required by an applicable standard, after the completion of the fieldwork.

SECTION G – GENERAL CONDITIONS**(a) General Compliance Requirements**

1. The permittee shall comply with all conditions of this permit. Noncompliance shall be a violation of 401 KAR 52:020 and of the Clean Air Act and is grounds for enforcement action including but not limited to termination, revocation and reissuance, revision or denial of a permit [Section 1a, 3 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020 Section 26].
2. The filing of a request by the permittee for any permit revision, revocation, reissuance, or termination, or of a notification of a planned change or anticipated noncompliance, shall not stay any permit condition [Section 1a, 6 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
3. This permit may be revised, revoked, reopened and reissued, or terminated for cause in accordance with 401 KAR 52:020, Section 19. The permit will be reopened for cause and revised accordingly under the following circumstances:
 - a. If additional requirements become applicable to the source and the remaining permit term is three (3) years or longer. In this case, the reopening shall be completed no later than eighteen (18) months after promulgation of the applicable requirement. A reopening shall not be required if compliance with the applicable requirement is not required until after the date on which the permit is due to expire, unless this permit or any of its terms and conditions have been extended pursuant to 401 KAR 52:020, Section 12;
 - b. The Cabinet or the U. S. EPA determines that the permit must be revised or revoked to assure compliance with the applicable requirements; or
 - c. The Cabinet or the U. S. EPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.

Proceedings to reopen and reissue a permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of the permit for which cause to reopen exists. Reopenings shall be made as expeditiously as practicable. Reopenings shall not be initiated before a notice of intent to reopen is provided to the source by the Division, at least thirty (30) days in advance of the date the permit is to be reopened, except that the Division may provide a shorter time period in the case of an emergency.

4. The permittee shall furnish information upon request of the Cabinet to determine if cause exists for modifying, revoking and reissuing, or terminating the permit; or compliance with the conditions of this permit [Section 1a, 7,8 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
5. The permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such facts or corrected information to the permitting authority [401 KAR 52:020, Section 7(1)].

SECTION G – GENERAL CONDITIONS (CONTINUED)

6. Any condition or portion of this permit which becomes suspended or is ruled invalid as a result of any legal or other action shall not invalidate any other portion or condition of this permit [Section 1a, 14 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
7. The permittee shall not use as a defense in an enforcement action the contention that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance [Section 1a, 4 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
8. Except for requirements identified in this permit as state-origin requirements, all terms and conditions shall be enforceable by the United States Environmental Protection Agency and citizens of the United States [Section 1a, 15 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
9. This permit shall be subject to suspension if the permittee fails to pay all emissions fees within 90 days after the date of notice as specified in 401 KAR 50:038, Section 3(6) [Section 1a, 10 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
10. Nothing in this permit shall alter or affect the liability of the permittee for any violation of applicable requirements prior to or at the time of permit issuance [401 KAR 52:020, Section 11(3)(b)].
11. This permit does not convey property rights or exclusive privileges [Section 1a, 9 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
12. Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals required by the Kentucky Environmental and Public Protection Cabinet or any other federal, state, or local agency.
13. Nothing in this permit shall alter or affect the authority of U.S. EPA to obtain information pursuant to Federal Statute 42 USC 7414, Inspections, monitoring, and entry [401 KAR 52:020, Section 11(3)(d)].
14. Nothing in this permit shall alter or affect the authority of U.S. EPA to impose emergency orders pursuant to Federal Statute 42 USC 7603, Emergency orders [401 KAR 52:020, Section 11(3)(a)].
15. This permit consolidates the authority of any previously issued PSD, NSR, or Synthetic Minor source preconstruction permit terms and conditions for various emission units and incorporates all requirements of those existing permits into one single permit for this source.
16. Pursuant to 401 KAR 52:020, Section 11, a permit shield shall not protect the owner or

SECTION G – GENERAL CONDITIONS (CONTINUED)

operator from enforcement actions for violating an applicable requirement prior to or at the time of issuance. Compliance with the conditions of a permit shall be considered compliance with:

- a. Applicable requirements that are included and specifically identified in the permit and
- b. Non-applicable requirements expressly identified in this permit.

17. Pursuant to 401 KAR 50:045, Section 2, a source required to conduct a performance test shall submit a completed Compliance Test Protocol form, DEP form 6028, or a test protocol a source has developed for submission to other regulatory agencies, in a format approved by the cabinet, to the Division's Frankfort Central Office a minimum of sixty (60) days prior to the scheduled test date. Pursuant to 401 KAR 50:045, Section 7, the Division shall be notified of the actual test date at least thirty (30) days prior to the test.

(b) Permit Expiration and Reapplication Requirements

1. This permit shall remain in effect for a fixed term of five (5) years following the original date of issue. Permit expiration shall terminate the source's right to operate unless a timely and complete renewal application has been submitted to the Division at least six months prior to the expiration date of the permit. Upon a timely and complete submittal, the authorization to operate within the terms and conditions of this permit, including any permit shield, shall remain in effect beyond the expiration date, until the renewal permit is issued or denied by the Division [401 KAR 52:020, Section 12].
2. The authority to operate granted shall cease to apply if the source fails to submit additional information requested by the Division after the completeness determination has been made on any application, by whatever deadline the Division sets [401 KAR 52:020 Section 8(2)].

(c) Permit Revisions

1. A minor permit revision procedure may be used for permit revisions involving the use of economic incentive, marketable permit, emission trading, and other similar approaches, to the extent that these minor permit revision procedures are explicitly provided for in the SIP or in applicable requirements and meet the relevant requirements of 401 KAR 52:020, Section 14(2).
2. This permit is not transferable by the permittee. Future owners and operators shall obtain a new permit from the Division for Air Quality. The new permit may be processed as an administrative amendment if no other change in this permit is necessary, and provided that a written agreement containing a specific date for transfer of permit responsibility coverage and liability between the current and new permittee has been submitted to the permitting authority within ten (10) days following the transfer.

(d) Construction, Start-Up, and Initial Compliance Demonstration Requirements

No construction authorized by this permit.

SECTION G – GENERAL CONDITIONS (CONTINUED)**(e) Acid Rain Program Requirements**

1. If an applicable requirement of Federal Statute 42 USC 7401 through 7671q (the Clean Air Act) is more stringent than an applicable requirement promulgated pursuant to Federal Statute 42 USC 7651 through 7651o (Title IV of the Act), both provisions shall apply, and both shall be state and federally enforceable.

(f) Emergency Provisions

1. Pursuant to 401 KAR 52:020 Section 24(1), an emergency shall constitute an affirmative defense to an action brought for the noncompliance with the technology-based emission limitations if the permittee demonstrates through properly signed contemporaneous operating logs or relevant evidence that:
 - a. An emergency occurred and the permittee can identify the cause of the emergency;
 - b. The permitted facility was at the time being properly operated;
 - c. During an emergency, the permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements in the permit; and
 - d. Pursuant to 401 KAR 52:020, 401 KAR 50:055, and KRS 224.01-400, the permittee notified the Division as promptly as possible and submitted written notice of the emergency to the Division when emission limitations were exceeded due to an emergency. The notice shall include a description of the emergency, steps taken to mitigate emissions, and corrective actions taken.
 - e. This requirement does not relieve the source of other local, state or federal notification requirements.
2. Emergency conditions listed in General Condition (f)1 above are in addition to any emergency or upset provision(s) contained in an applicable requirement [401 KAR 52:020, Section 24(3)].
3. In an enforcement proceeding, the permittee seeking to establish the occurrence of an emergency shall have the burden of proof [401 KAR 52:020, Section 24(2)].

(g) Risk Management Provisions

1. The permittee shall comply with all applicable requirements of 401 KAR Chapter 68, Chemical Accident Prevention, which incorporates by reference 40 CFR Part 68, Risk Management Plan provisions. If required, the permittee shall comply with the Risk Management Program and submit a Risk Management Plan to:

RMP Reporting Center
P.O. Box 3346
Merrifield, VA, 22116-3346

2. If requested, submit additional relevant information to the Division or the U.S. EPA.

SECTION G – GENERAL CONDITIONS (CONTINUED)

(h) Ozone depleting substances

1. The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR 82, Subpart F, except as provided for Motor Vehicle Air Conditioners (MVACs) in Subpart B:
 - a. Persons opening appliances for maintenance, service, repair, or disposal shall comply with the required practices contained in 40 CFR 82.156.
 - b. Equipment used during the maintenance, service, repair, or disposal of appliances shall comply with the standards for recycling and recovery equipment contained in 40 CFR 82.158.
 - c. Persons performing maintenance, service, repair, or disposal of appliances shall be certified by an approved technician certification program pursuant to 40 CFR 82.161.
 - d. Persons disposing of small appliances, MVACs, and MVAC-like appliances (as defined at 40 CFR 82.152) shall comply with the recordkeeping requirements pursuant to 40 CFR 82.166
 - e. Persons owning commercial or industrial process refrigeration equipment shall comply with the leak repair requirements pursuant to 40 CFR 82.156.
 - f. Owners/operators of appliances normally containing 50 or more pounds of refrigerant shall keep records of refrigerant purchased and added to such appliances pursuant to 40 CFR 82.166.
2. If the permittee performs service on motor (fleet) vehicle air conditioners containing ozone-depleting substances, the source shall comply with all applicable requirements as specified in 40 CFR 82, Subpart B, *Servicing of Motor Vehicle Air Conditioners*.

SECTION H – ALTERNATE OPERATING SCENARIOS

Not Applicable.

SECTION I - COMPLIANCE SCHEDULE

Not Applicable.